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ABSTRACT

The overall social studies recommended program is described in SO 000 675; the nature of this guide, and the emphasis and organization of the units are described in SO 000 679. The three units in this part of the third grade course are: Tropical Rainforest, Mountain Communities, and Grassland Communities involving the typical climatic conditions, location, and economic and social organization of these communities in the United States and neighboring countries. (SBE)

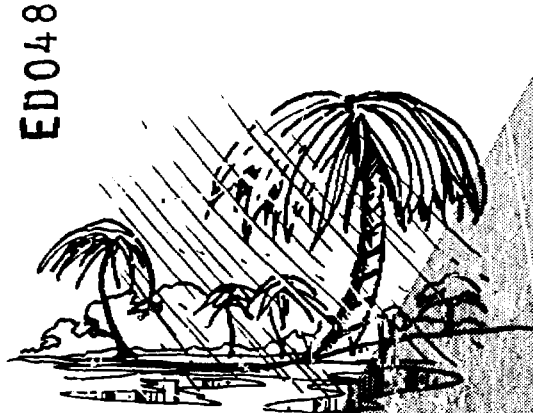
SOCIAL STUDIES

GRADE 3

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TEACHING SYSTEMS II



TROPICAL RAIN FOREST

MOUNTAIN COMMUNITIES



GRASSLAND COMMUNITIES

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Foreword

This publication has been prepared by the Curriculum Development Center in response to many requests from teachers for help in implementing the new social studies. In the pages which follow, suggestions are given for the teaching of three units of the third grade program, followed by extensive listings of the materials which are available for use in such teaching.

This material was prepared by a team consisting of Concetta Morgan, third grade teacher in the East Islip Schools, Lynne Noel, third grade teacher in the Owego-Apalachin Schools, Joan Byam, librarian in the North Colonie Schools, and Marjorie Markell, librarian in the East Greenbush Schools. The publication was prepared for press by Howard Yates of the Elementary Curriculum Bureau.

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Introduction and Overview - Third Grade Community Studies

The nature of the relationship between man and his physical environment will be explored this year. The delicate balance between man's effect on his land and the land's effect on human culture reveals itself as the children explore life in several geographic communities.

Mastery of the skills of the Social Studies as the tools for learning and action and the development of understandings are the desired outcomes, with a foundation of pertinent facts serving only to support broad generalizations or concepts of curriculum content. Understandings as inclusive as those needed to develop the Social Studies skills will demand an encompassing variety of materials and media. No single source or method will result in the learning or practicing of these skills. Locating and organizing information, interpreting pictures, charts, maps, observing, applying problem-solving techniques and critical thinking to his own life, and working with others, are the skills in which the third grader will need instruction and the means by which he will discover man's interaction with the land.

These teaching systems, organized according to regional community study, may serve as a guide for teachers in selecting appropriate activities and media with respect to the abilities and needs of their groups. Cognizant always that the understandings supersede in importance any mastery of factual information, the teacher should initiate various types of activities which draw upon more than one type of skill. Necessarily these teaching systems provide for limitless extension; those activities included are merely starting points for teacher and class creativity.

Concurrent with the basic aims of skill development, evaluation must be a continuing process involving a wide variety of approaches, often based on observation. The child's competency in applying his skills in gaining knowledge of a region must result in his ability to feel, empathize, to look and then to see, to probe, to question, and finally to assimilate understandings and attitudes into his patterns of behavior.

Exposure to ways of living in various regions of the world will complement the child's own pride in, and expanded appreciation for, his own heritage as an American. He will view the world with avid curiosity, yet possess the skills with which he may meet it confidently--with self-discipline, self-dependence and self-direction.

TROPICAL RAIN FOREST COMMUNITIES

Stating the Problem

- How do people in tropical rain forest areas adapt to their environment?
- What effect does climate have on vegetation in the tropical rain forest?

Understandings To Be Developed (Geography)

1. Tropical rain forest areas are located only in the low latitudes near the equator.
2. The most extensive selva lands are found in the Amazon valley, the Congo Basin, the eastern lowlands of Central America and the islands of Indonesia.
3. Climatic conditions create tropical rain forests.
4. The weather is always warm in tropical lowlands and there are no prolonged dry seasons.
5. There must be at least 60 inches of rainfall per year.
6. When rainfall is heavy, conditions are right for the growth of rainforests.
7. Warm winds from the ocean blow over rain forest areas, carrying large amounts of moisture which falls as rain.
8. The soil in the tropical rain forest lands is low in fertility because continuous heavy rains and high temperatures wash (or leach) the mineral nutrients from the soil.
9. Tropical forests grow well because their shallow, extensive root systems utilize the humus (organic material) which the trees themselves create as their leaves, fruits and branches drop to the ground and decay.

Information Needed (To Develop Understandings)

1. What is a tropical rain forest and where are these areas located?
2. Why are the most extensive tropical rain forests located in low latitudes?

3. What is the difference between a tropical rain forest and a jungle?
4. Why is the weather always warm in the tropical lowlands?
5. Why are tropical rain forests not always the hottest places in the world?
6. What effect do warm ocean winds have on tropical rain forests?
7. Why is the soil low in fertility in the rain forest?
8. How does leaching take place and what causes it?
9. Why do tropical rain forests grow well in areas of low soil fertility?
10. How does a hot, wet climate cause decomposition (rotting) of the foliage which falls from the trees?

Learning Activities (Geography)

1. Using a dictionary, define tropical, rain forest, selva and include definitions in Social Studies notebook.
2. Such films as "The Tropical Rain Forest" - (Encyclopaedia Britannica Films - 17 min) shows the relationship between the climate and vegetation of the rain forest.
3. Locate tropical rain forest areas of the world on vegetation map (perhaps using Rand McNally's "Climates of the Earth" map (WG 906 C \$19.95) to review the relationship of climate and latitude.
4. Divide the class into three groups and, on the class-made world map, let each group color in one major rain forest area (choose an appropriate color). Discuss effect of warm ocean currents as agents of moisture for the tropical rain forest.
5. Project a rainfall map of Africa (*Africa* - Fidler Publishers) (using opaque projector) on class screen and discuss its meaning. Locate the tropical rain forest areas. Children may then make bar graphs or line graphs showing a comparison of the amount of annual rainfall near their homes (about 40 inches) with the amount in rainforest areas. Review and compare desert rainfall and include on graph.
6. Children will appreciate the length of time it takes rainfall to accumulate by doing this experiment. Place a whirling lawn sprinkler in the center of a child's plastic swimming pool and let children periodically measure the water accumulation in the pool.

7. View and discuss such filmstrip series as "The Tropical Rain Forest" (Eyegate - 6 filmstrips - \$30). It shows length of day and night, rainfall, lack of seasons, etc.
8. Begin to collect pictures of the rain forest. Children may use special *Life* issue "The Teeming Rain Forest of the Tropics" (Sept. 20, 1954). This has an accompanying filmstrip which may need teacher explanation.
9. Take a trip to a museum of natural history to see a display of the tropical rain forests. ("Man from Montana" exhibit at the American Museum of Natural History in New York City).
10. An illustration of the effect of leaching might be made by placing soil in a kitchen collander. Pour in a quantity of water and note the color of this water as it seeps out the bottom. Explain that a part of the discoloration of the water is due to the dissolving of the minerals in the soil.
11. There are several methods children might try to demonstrate the amount of moisture in the air (humidity). If they have made a terrarium for the northern forest unit, they may have observed the tiny drops on the glass which fall again on the plants. Where did this moisture come from? Where does much moisture come from in the rain forest? As an indicator of the humidity, make a film hygrometer. Thumb tack a strip of 35mm., or other film inclined to curl when dry, to an old ruler or stake marked off in inches. Place such film sticks in selected areas and after an hour see how far the film has curled or uncurled in each location. Try experiment on both sunny and dry or rainy, wet days. Children then may add the word "humidity" to their Social Studies notebook.
12. Teacher may send away for weather and temperature instruments from Taylor Instrument Cos., Rochester, N. Y., or to C. S. Hammond for weather kit and colored maps, Maplewood, N. J.
13. Children may draw or find pictures of animals of the tropical rain forest (*Life* special issue is helpful). Books such as *Tropical Rain Forest* by Delia Goetz (Morrow) will help.
14. Create the atmosphere of a tropical rain forest by sitting in a darkened room and listening to records of sounds of the areas, (such as Folkways/Scholastic Records #6120 "Sounds of a Tropical Rain Forest in America" - \$4.25).
15. Discuss the differences between a jungle and a rain forest using pictures, diagrams, or slides. Be sure to indicate the dense undergrowth in a jungle compared with the barren, damp ground under the canopy of tall trees in the rain forest.

16. Make a comparison temperature chart of middle and low latitude cities throughout the world, noting that some middle latitude areas (Baltimore, for example) often exceed in daily temperatures those in low latitudes. (Encyclopedias or monthly averages in *Holiday* magazine may serve as sources of information.)
17. Class may begin an ongoing project of building a rain forest table-top display. The topography and layout could be discussed and preliminary sketches or maps drawn. Several layers of papier mache base could be placed and molded to show the Amazon River, its banks, the forest floor, etc. Children may paint these and proceed to model trees and vegetation (using books and displays as guides) and place them on the table.
18. Walk to a wooded area and collect some humus. Return to class and discuss the importance of humus to soil fertility.
19. Plant seeds in several soil types (sandy, gravel, loam) and select one to represent the tropical rain forest. Water it heavily and observe the results.
20. If children need more background to understand the evaporation-condensation principle at work in rain forests, such tapes as "Let's Find Out About Water" (SG41 - Imperial Productions, Inc., - 15 min. - \$3.75) may be used.

Understandings To Be Developed (Social Organization)

1. Natives of selva lands tend to live in extended family groups (aunts, uncles, cousins all live together).
2. They usually live in scattered clearings in the forest.
3. Relationships, unlike ours, are often traced through the mother's side of the family (matrilineal).
4. Religion often plays an important role in the lives of selva natives.
5. They have many different, and often strong, religious beliefs, usually concerned with their natural environment (powers of the sun, moon, stars).
6. Their religious leaders are often called "witch doctors" who are believed to have magical powers derived from trees, animals, etc. They may also treat the ill.

Information Needed (To Develop Understandings)

1. Why do almost all people everywhere live in family groups?

2. Why do family ties remain close among natives of the tropical rain forest?
3. Why do some people trace relationships through the mother's side of the family?
4. Why do selva people live in small villages in forest clearings rather than in larger, permanent villages?
5. Why do most people everywhere have some sort of religious beliefs?
6. Why are the religious beliefs of native people usually concerned with their natural environment?
7. Why would banana companies build communities in selva lands?

Learning Activities (Social Organization)

1. Collect all the books, pictures and other sources of information available on the life of people in the tropical rain forest.
2. Cooperatively list key words which might be used in encyclopedias to refer to life in the tropical rain forests. Review use of the encyclopedia.
3. Divide into committees to research either topically (homes, food, clothing, animals) the aspects of life in these areas or regionally (life in the Amazon basin, the Congo valley, etc.) and prepare reports to share with the rest of the class.
4. View and discuss films or filmstrips on life in the rain forest such as "Life in the Tropical Forest" (#67D filmstrip of series 67 "South America: A Regional Study" - Eyegate - \$5) or film "Life in Hot Rain Forests" (Coronet film - 13 min.).
5. Compare family life in the rain forests of each of three areas by discussing such filmstrips as the following: "Life in Indonesia" (#159909 - Far East Series) and "Equatorial Africa" (#402100 - Families of the World Series), "Children of Brazil" (165C "Children of South America" series - 165 - Eyegate) and "I Live in the West Indies" (#ME804 from series ME80 "Children of the World" - Eyegate).
6. Girls might dress small dolls in clothing they make themselves which would be appropriate to the rain forest. Continental Press duplicator set "Children of Many Lands" may be helpful.
7. Display study prints which help children see the dress and physical features of the people in tropical rain forest areas. Suggested study print sets are Set SP-131 "Children of Africa", Set SP-135 "Children of South America" and Set SP-136 "Children of Australia &

Pacific Islands" (all in "Children of the World Series" PSSP-600, Society for Visual Education, Inc. - \$8 per set).

8. Listen to and compare the music of each area studied. Use such albums as "Music of Indonesia" #4537; "Folk Music of the Western Congo" #4427; "Indian Music of the Upper Amazon #4458; and "West Indian Folk Songs for Children" #7744 all from Folkways/Scholastic Records.
9. Individuals may read and make reports of a role-playing nature on daily life in the rain forest. Suggested books are: *Agossou: Boy of Africa* (by Dominique Darbois, Follet Publishers); *River Boy* by Ralph Herrmanns (Harcourt); *Parana, Boy of the Amazon* by Francis Maziere (Follett).
10. View and discuss films such as "A People of the Congo" (Encyclopaedia Britannica Films - rental \$3.50) or filmstrips such as "Amazon Village" (from series #8560 "South America-Eastern and Southern Lands"), noticing especially the homes, dress, and daily activities of tropical rain forest people.
11. Construct homes for your classroom table display. Straw or hay, grass and leaves can be used to simulate thatched roofs on homes made of oaktag paper or milk cartons. Modeling clay would serve for figures arranged in activities typical of the area (women gardening or weaving, men hunting using blowguns, etc.).
12. Experiment with weaving by using wood looms, or weave paper mats. Gather long grasses or tree vines and braid or weave some together to simulate the mats used in homes of the rain forest.
13. Study the art forms of tropical rain forest areas by sending for a free soap carving exhibit (send to National Soap Sculpture Committee, 160 Fifth Ave., New York 10, N. Y.) and compare it to the ivory carving of the Congo people. View film "Sarong and Silver" (Embassy of Malaysia - 20 min. - free - write to Mr. Matthew Mandis, 2401 Massachusetts Ave., Northwest, Washington, D. C. 20008 for information on handicrafts) or view "My Nghe Pham" about producing art objects in Viet Nam. (Embassy of Viet Nam, 2251 R Street, Northwest, Washington, D. C. 20000). The art experience of pottery making would also apply here.
14. Have children list foods native to tropical rain forest areas (the Amazon, the Congo, and Indonesia). Divide class into three groups to plan and prepare a Food Sampling Party, according to each area above. Some typical food might be: bananas, pineapples, nuts, rice, tea, coffee, cocoa, squash, peanuts, sugar and sugar cane, coconut, maize, spices, etc.). Films such as "Food of Southeast Asia" (18 min. - Film Associates) may help.

15. Bring in samples of shampoos or perfumes which contain palm oil, jasmin, etc. Arrange a display of labels from household cans, and goods which have rain forest products as ingredients.
16. Tape recordings can be exchanged with other lands (in English or in native languages) through the services of World Tape Pals, Inc., P.O. Box 9211, Dallas 15, Texas).
17. Darken the room and listen to a recording of Rachel Lindsay's poem "The Congo." Children will be thrilled by the drum rhythms and chanting. It is wise to have the words duplicated so children can follow the poem more easily.
18. Children might also enjoy playing games typical of rain forest communities. For the Congo, learn: "Mulambilwa" or "Nswkwil" pp. 15 & 61; for Malaya "Calah Panjang" or "Bamboo Long" p. 104 or for Brazil "Hit the Penny" or "Morral" pp. 31 & 32 - all from *Games of Many Nations* by E. O. Harbin (Abingdon Press).
19. To capture the feeling of the ceremonials and music of rain forest areas, ask for volunteers to improvise their own dances to the rhythmic beat of African music or Brazilian Indian music.
20. Religion in rain forest areas is well explained in such books as *Land in the Sun* (by Russell Davis). Individuals may report on aspects of religious life in these areas (the history, witch doctor, relationship to art forms and nature).
21. The ceremonial masks of witch doctors could be illustrated by children's construction using either a paper bag or 3-dimensional natural materials (i.e. berries, leaves, vines, flowers, nuts, etc.).
22. Children may make instruments (drums, marracas), or weapons and tools (blowguns, digging sticks) used by selva people.
23. Additional information and colorful pictures about the rain forest are available through back issues of *National Geographic* magazine. "Brazil-Jungle Jaunt on Amazon Headwaters" (Sept., 1952); "The Jungle was My Home" (Nov., 1952); "White Man's Magic-Congo" (March, 1952); "Into the Heart of Africa" (Aug., 1956); "Indonesia" (Jan., 1951 & Sept., 1955).
24. Discuss the nomadic aspects of some rain forest families as they move from clearing to clearing, banding together for survival. *The Nomads of the Jungle*, (a book listed in the Education Film Guide Co., 1953) may serve as basis for discussion.
25. Draw a mural of an Amazon forest clearing showing homes, gardens, daily activities, natural vegetation. (Use "Life in Hot Rain Forests" - 13 1/2 min. film - Coronet Films) as reference.

26. Initiate a lesson in matrilineal relationships by asking the children to write on paper their full name and then the names of all the other people in their family. Discover that all the last names came from the father's name. Continue with a simple explanation of how our patrilineal system differs from the matrilineal pattern found among some rain forest people (for example: natives of the Congo basin).
27. Send for "The Banana Story" - a free, colorful folder from the United Fruit Co. (Dept. WW, Educational Service Dept., Pier 3, North River, N. Y. 16, N. Y.) - Shows steps in growing bananas, and harvesting. Also view such filmstrips as "José Harvests Bananas" - (#401335 - "Children of Latin America" - McGraw-Hill - \$6.50) and compare the daily life of the people in an Amazon clearing with that of workers on a banana plantation. For further comparison see "Indonesia Village and City Life" (from "Australia, Indonesia and the Philippines" series #560 - Jam Handy - \$5.95) or #606 "An African Village Near the Equator" (series #80 - "Africa-Equatorial and Central" - Curriculum Films - color filmstrip - \$4.95).
28. Students might read simple biographies of Albert Schweitzer or David Livingstone and tell about the work each did in the rain forest lands. *The Story of Albert Schweitzer* (by Jo Manton) may be one biography.
29. When possible, invite a missionary or Peace Corps volunteer recently returned from a rain forest area to tell about the religious beliefs of native groups.

Understandings To Be Developed (Economic Organization)

1. The economic base of life for most natives of the selva is a shifting type of agriculture.
 - Crops are planted in cleared areas for 1 or 2 years when soil becomes infertile the area is left to revert to forest and a new clearing is made.
 - The crops grown are subsistence foodstuffs such as cassava, breadfruit, and tara, which are commonly found in tropical lands.
2. The economic base of life in much of eastern Central America is the banana plantation.
 - Large American banana companies have cleared the land, and have extensively used chemical fertilizers.
 - Many men are employed to work on the plantations, and they earn good wages.

- The bananas grown are sold mostly in the United States.
- 3. The economic base of life in much of Indonesia and Southeast Asia is wet rice agriculture.
 - Large forest areas have been cleared there and the land made into paddies which can be flooded.
 - The soil in much of Indonesia is fertile because it has been formed by recent volcanic action and is therefore rich in minerals.
 - The growing of rice is a form of subsistence agriculture, since most of the crop is consumed by those who grow it.

Information Needed (To Develop Understandings)

1. How do natives of the rain forest get their food?
2. Why do the natives move often to new clearings?
3. Why is there limited crop production by natives in the selva?
4. Why did American companies develop banana plantations in Central America?
5. What effect could fertilizer have on soil productivity in rain forest areas?
6. Why are bananas sold in the United States rather than in Central America?
7. What is the economic base of life in Southeast Asia and Indonesia?
8. What effect has volcanic action had on soil fertility in that area?
9. What is the difference between subsistence and commercial farming?
10. Why is rice the diet staple of so many peoples of the world?

Learning Activities (Economic Organization)

1. Have children note the types of vegetation found in tropical rain forests. What kinds of food might be found in this area? List or make a chart of these. Then use an encyclopedia or other reference tool to find other foods of the area. Decide which industries have developed around some of these foods (rubber, rice, bananas, coffee).

2. View and discuss such filmstrips as "The Story of Rubber" (#192 of Series 24 - "South America" - Curriculum Filmstrips - \$4.95) or "How We Get Our Rubber" (from series #4149 - "Products and Industries" - Key Productions - b&w \$4). Send for *THE WONDER BOOK OF RUBBER* - tells how rubber is produced and used (from The B. F. Goodrich Co., 500 South Main St., Akron 18, Ohio).
3. View and discuss films on bananas to illustrate the importance of this fruit to tropical economies - (example: "Treasures of the Tropics" - free film from United Fruit Co., or obtained through Association Films Inc.).
4. Trace the route of a banana from its growth on a plantation in Central America to its consumption in the children's homes. Discuss all people whose jobs are concerned with the banana (the grower, picker, shipper, wholesale distributor, grocer).
5. Send for free film "Story of Malaya and Natural Rubber" - centers around way of life on a plantation (from Audio Visual Associates - color - 30 min.) or send for free filmstrip "A Class Studies Rubber" (may be retained permanently - 15 min. - Dept. of Public Relations, Firestone Tire and Rubber Co., Akron, Ohio 44317). The importance of rubber worldwide is shown in film "Rubber in Today's World" (Coronet films - 11 min. - rental \$6).
6. Make a table display of rubber products used by children and their families. Send for "The Story of the Tire" (Public Relations, Goodyear Tire and Rubber, Akron 16, Ohio).
7. Send for an exhibit of cotton ball, rice and sugar cane from the Louisiana Dept. of Agriculture and Immigration (Immigration Division, 317 State Office Bldg., 325 Loyola Ave., New Orleans, La. 70112). Compare wild rice with bleached white rice.
8. View and discuss film "Master Farmer Kum Yeng" (from Embassy of Malaysia - 2401 Massachusetts Ave., Northwest Washington, D. C. 20008) to see agrarian life in a large rice-growing area or filmstrip "Rice: Food of the Orient" (A-156 from series "Island Communities" - Curriculum Filmstrips - \$6). Discuss the importance of rice to the rest of the world after seeing "Rice in Today's World" (Coronet Films - 11 min. - \$6).
9. Display study prints from Ideal Co. (order through J. L. Hammett Co., 165 Water St., Lyons, N. Y.) "The Rubber Industry," "The Rice Industry," "The Coffee Industry," "The Banana Industry."
10. Able students might read article in *National Geographic Magazine* (May, 1949) "How Fruit Came to America," or "Rubber in Indonesia" (Jan., 1951), or "Sugar in Barbados" (Mar., 1952) or "Cocoa: Happy Go Lucky Trinidad & Tobago" (Jan., 1953) and make reports to rest of class.

11. View and discuss free film "The Magic Cup" (story of coffee production) from Modern Talking Pictures Service (3 East 54th St., New York, N. Y. 10022) or have a child report on *Land of Coffee* (#6281 - book based on Encyclopaedia Britannica Film - \$1.55).
12. What is valuable in a community depends on its availability and usefulness. To illustrate this have children list specific products needed in rain forest communities (sharp knives, cooking utensils, etc.). Discuss why manufactured clothing, TV sets, cars, etc. are not in great demand there, and thus not valuable in rain forest areas. Which items of value in the rain forest are also valuable in your town?
13. Send for cocoa chart from Hershey's Educational Dept., (19 East Chocolate Ave., Hershey, Pa. 17033) or for "Chocolate" - a comic book style account of chocolate from cacao bean to chocolate bar (The Nestle Co., Box 48-B, New York 12, N. Y.)
14. Discuss the importance of palm tree products and uses. View "The Tree of Wealth" (from Information Service of India, Film Section, 3 East 64th St., New York, N. Y. 10021).
15. Discuss the establishment of American companies in tropical rain forest areas and the economic importance of these areas. View such filmstrips as 188B "The West Indies and the United States" (from series 188 "The West Indies" - Eyegate Co. - \$5) or "Brazil Industries & Products" (#137E from Series 137 "South America: The ABC Nations, Uruguay & Paraguay" - Eyegate - \$5) shows interdependence of the Americans - be selective in frames related to rain forest areas of Brazil.
16. Discuss the term "plantation" and its comparison in size to a garden or farm. Add plantation to your Social Studies notebook and locate Central America on maps.
17. Define and discuss the concept of a company and its simple organization, using parents or other available people involved in local companies. Set up a class company (perhaps to grow radishes or a fast growing fruit) to give children experience in the growing, production and selling of a product. Rotate job titles and responsibilities (managers, laborers, etc.) to give children a better understanding of the term "company."
18. Children might prepare a mural of village life and activities in a rice village of Southeast Asia and compare it with one drawn of the Amazon village. Use for reference *Our Rice Village in Cambodia* by Ruth Tooze (Viking Press, 1963).
19. If a representative of a large fruit or rubber company located in Central America or South America is available, invite him to speak to the class about his company and answer class questions.

20. You may obtain charts and booklets below from the American Spice Trade Association. Ask for booklet "Spice Recipes from Many Lands," "Spices-What They Are and Where They Come From" and "Spice Map" (350 Fifth Ave., New York, N. Y. 10001).
21. Discuss the effect of volcanic action on soil and the resultant fertility in some rain forest areas. As an illustration, discuss the book *Tropical Mountain Island (Java)* listed in Educational Film Guide, 1953.
22. To summarize the economic organization of many rain forest areas, place product symbols on your world classroom map.

Understandings To Be Developed (Political Organization)

1. Native people in selva lands such as the Amazon basin and Congo valley have a type of tribal organization.
 - Tribes are governed by chiefs whose positions of authority are usually inherited.
 - Tribal organization is superficial and rules and regulations are few, since the population is scattered in forest clearings.
2. The banana plantation workers live in well-organized communities (with stores, churches, etc.). This requires many more rules and regulations to govern life.
 - These communities are usually governed by representatives of the American companies that built them.
 - The companies make and enforce the rules, since they provide all the facilities.
3. Indonesian communities are well developed and organized.
 - They are governed by a representative of the central government in cooperation with a village council.
 - Many rules and regulations must be followed since villages are fairly large.

Information Needed (To Develop Understandings)

1. Why do people in undeveloped lands usually organize themselves into tribal groups?
2. Why do the native people in selva lands (Amazon basin & Congo valley) need few rules and regulations to govern their lives?

3. Why do organized or developed communities need more rules and regulations than undeveloped communities?
4. To what extent is the government democratic in a community built and administered by a banana company?
5. What type of government is found in Indonesian communities?

Learning Activities (Political Organization)

1. Summarize the various types of economic structures existing in the rain forest areas studied. Compare the simple, subsistence agriculture of the Amazon or Congo basins with the organized, developed economy of American companies in eastern Central America. What effect would these economic structures have on the political organization of the area?
2. Have one child assume the role of representative for the class, whose job it is to take to the school principal the group's ideas or concerns on a pertinent topic (establishing safety rules, obtaining something for the classroom, etc.). The members of the class must make their ideas clear to the representative, who in turn must explain them to the principal. Experiences of this nature may be related to the Indonesian form of government wherein a representative of the central government works in cooperation with a village council.
3. Review tribal organization discovered in previous units and have children use Afro-American, or Brazilian names for chiefs of small experimental tribes. Establish three tribes and pretend it is time for one tribe to move to a new clearing. What other circumstances might require cooperation among tribal chiefs? What cooperation may be needed among the three chiefs?
4. Able students might read about Indonesia in an encyclopedia and report on the form of government there.
5. Illustrate the interdependence of native people and American banana companies by role playing a situation in which the class is divided into laborers and company representatives. Have the workers list the things they need to live happily (homes, schools, churches, etc.). What does the company need to succeed? (Workers). What rules might be needed to assure cooperation between the two groups? As a further illustration, see filmstrip "Honduras-A Banana Republic" (#7773 by Budek Co. in "Central & South America" series - \$3).
6. Write to Embassy of Indonesia for more information about government of Indonesia. Children might prepare a list of questions to be asked.

7. Research to find the flags and national symbols of Indonesia, Brazil, Republic of Congo, Honduras, and Guatemala. Make a class report and display.
8. Chart, for comparison, the government organizations of an Amazon village, Central American banana community, and an Indonesian village with respect to position of leadership and terminology, (chief or president), and subordinates (village council, etc.). Where possible, current news publications may provide pictures of personalities to be pasted in appropriate bulletin board space.

Evaluation

- I. Pupil Self-Evaluation - see suggested form in Desert unit.
- II. A. Teacher Evaluation - see suggested form in Desert unit.
 - B. Discussion Questions for Review
 - . What is a rain forest and where are these areas located?
 - . What is the effect of climate on plant growth and soil in the rain forest?
 - . What aspects of the rain forest encourage or discourage permanent settlement?
 - . What role have American companies played in the development of some rain forest areas?
 - . Why is rice a staple food of so many people of the world?
 - . What types of government are found in rain forests?
 - . Compare the daily lives of a family in the Congo basin with those of a family in Indonesia or eastern Central America.
 - C. Other Evaluative Techniques
 - . Creation of multiple choice short answer and matching tests (mastery of pertinent facts and skills).
 - . Invite another class to listen to summary of committee reports and/or see and hear about the table display of rain forest.
 - . Suggested essay questions
 - In what ways are all rain forests alike?

- What is the difference between a jungle and a rain forest?
- List products used in your home that are grown or come from products of the rain forest.
- Why do the people in an Indonesian rice village have more rules and regulations than the people of a tribe in the Amazon valley?

III. Cooperative Evaluation

- . What ways of living are found in rain forest areas? How are they similar or dissimilar?
- . What type of climate produces a rain forest?
- . Use an opaque projector and ask children to identify each of three groups of people carrying on daily activities in the rain forest. (Show one rice village of Indonesia, an Amazon or Congo tribe, a plantation in Central America.) Encourage children to describe the ongoing activity and to anticipate the next actions in the sequence of events.
- . Have children role play parts of travel agents for each rain forest area studied and ask each to "sell" his area to a group of prospective travelers.
- . Which activities did we like most? Least? Why?
- . Devise a chart similar to the one at the conclusion of the taiga unit for summary of only pertinent information on rain forest areas.
- . Committees could plan for and invite parents to "An Afternoon in the Rain Forest." Children could display murals and artwork, masks, perform dances, and act as tour guides around the room. Committee reports and a brief class play might be presented. Rain forest refreshments might be served.

Teaching Materials

Teachers' References

Books

Carter, George. Man and the land. Holt. 1964. \$9.95.

Kimble, George, & Steel, Ronald. Tropical Africa today. McGraw-Hill. 1966. \$3.95. 7-10.

A comprehensive account of the area of Africa which lies between the Sahara Desert and South Africa

Smith, Datus. The land and people of Indonesia. Lippincott. 1963. \$2.93. 7-9. (Portraits of the nations series)

Gives detailed information about the land, the people, their culture, their way of life as a colony, and the present day struggle to maintain independence. Mostly for teacher use.

Thurnbull, Colin. The peoples of Africa. World. 1962. \$3.50. 7-9.

A study of the diverse peoples of Africa, explaining reasons for their becoming hunters, herders, or cultivators. Discusses the tribal societies, their structure, beliefs and mores. For very able reader or teacher use.

Periodicals

Holiday. Holiday House. 8 West 13th St., New York, N. Y. Monthly. \$5.95.

Life. Time Inc. Chicago, Ill. Weekly. \$7.75.

National Geographic Magazine. National Geographic Society, Washington, D. C. Monthly. \$8.

Materials for Children

Books

Allen, William. Africa. Fider. 1962. \$3.88. 4-7. (Life in other lands)

Presents geography, social life, customs, industrial development of Africa today

elli, John. Caribbean lands. Fider. 1965. \$5.33. 4-6.

Presents an overview of Central America and the West Indies

including geography, history, natural resources, people, and industries of each country

Berry, Erick. Eating and cooking around the world; fingers before forks. Day. 1963. \$3.50. 5-7.

Describes the foods, cooking, serving, and eating customs of peoples of several regions. Includes Indians of Central America, Indians of South America, and people of Lapland as well as others.

Breetveld, Jim. Getting to know Brazil. Coward. 1960. \$2.52. 4-6. (The Getting to know books)

Describes life in Brazil - land, plant and animal life, resources, people, etc.

Beull, Hal. Main streets of Southeast Asia. Dodd. 1962. \$3.50. 4-6.

Presents the cities of Southeast Asia - Hong Kong, Thailand, Cambodia, Viet Nam, Burma, Malaya, Singapore, and Indonesia.

Buehr, Walter. Rubber. Morrow. 1964. \$3. 4-6.

Explains the importance of rubber industry today. Tells where rubber comes from, traces its increasing use.

Caldwell, John. Let's visit Central America. Day. 1964. \$2.86. 4-6. (Let's visit series).

Presents the Panama Canal, the United States Canal Zone and the countries of Central America: Guatemala, El Salvador, British Honduras, Honduras, Nicaragua, Costa Rica. All of these countries have land areas that are considered tropical rain forests.

Let's visit Indonesia. Day. 1960. \$2.86. 4-6.

Discusses customs and living conditions of the country which is becoming more and more important in today's world affairs

Caldwell, J. C. Let's visit Middle Africa. Day. 1963. \$2.98. 4-6.

Presents geography of East and Central Africa and the Congo - history, geography, climate, people, animals

Daniel, Anita. The story of Albert Schweitzer. Random. 1957. \$2.28. 4-6. (World landmark books)

The emphasis in this biography is on Dr. Schweitzer's work in the African forest.

Darbois, Dominique. Agossou, boy of Africa. Follett. 1962. \$1.46. K-3.

Agossou lives in a village surrounded by forest. An account of his daily life as he grows corn with his father, markets with his mother, goes fishing, and plays games with his friends.

Dreany, E. J. Magic of rubber. Putnam. 1960. \$2.68. 3-7.

- Dreany, Joseph. The magic of spices. Putnam. 1961. \$2.68. 4-6.
Tells where our spices come from and explains their importance during the age of exploration and today
- Eaton, Jeanette. David Livingstone, foe of darkness. Morrow. 1947. \$2.51. 7-9.
The account of the life of this missionary and explorer who spent most of his life in Africa
- Eberle, Irmengarde. Grasses. Walck. 1960. \$2.25. 4-6.
Describes the cultivation and use of many types of grasses - hay, sugar cane, wheat, rice, and bamboo
- _____. New world of rubber. Dodd. 1966. \$2.79. 2-6.
- Fenton, Carroll. Fruits we eat. Day. 1961. \$3.50. 4-7.
Tells where fruits we eat come from, how taste and texture of some have changed. Includes fruits with cores; composite fruits; citrus fruits; olives and palms, etc.
- Fideler, Raymond. South America. Fideler. 1965. \$4.08. 4-6. (American neighbors)
Survey of the continent - geography, history, people, economy, recreation, etc. Includes summary of important facts for each nation.
- Goetz, Delia. Tropical rain forests. Morrow. 1957. \$2.78. 3-5.
(Morrow junior books)
Tells about the ways of life in a rain forest - the climate, the vegetation, the products and the people
- Hammond, Winifred. Rice; food for a hungry world. Coward. 1961. \$2.35. 4-7.
An account of the significance of rice as a staple food for two-thirds of the world's population. Includes historical and religious aspects of rice growing. For very able student and teacher use.
- Harbin, E. O. Games of many nations. Abingdon. 1954. \$1.88. 4-7.
Arranged by country from Africa to Uruguay, this is a collection of games with directions and sometimes music from 28 different peoples.
- Herrmanns, Ralph. River boy; adventure on the Amazon. Harcourt. 1965. \$3.02. 2-5.
The story of an Indian boy who leaves his home near the headwaters of the Amazon and travels to the sea to find his brother. A good presentation of life on the Amazon River.
- Hughes, Langston. The first book of Africa. Watts. 1964. \$2.65. 4-7.
Presents some history of Africa including brief biographies of Livingstone and Stanley, Cecil Rhodes and Albert Schweitzer. Includes presentation of African peoples, the geography, governments and politics of several African countries.

- Joy, Charles. Getting to know the river Amazon. Coward. 1963. \$2.52. 4-6. (Getting to know books)
Traces the river from its source to its outlet in the Atlantic Ocean 4,000 miles away
- Kalish, Betty. Site's summer. Macmillan. 1964. \$3.92. 4-6.
Fiction which reveals Indonesian life. Site's mother is ill; her father is in the army. She leaves her city home to stay with her great grandfather in the country.
- Karen, Ruth. The land and people of Central America. Lippincott. 1965. \$2.93. 4-7. (Portraits of the nations series)
Source of information concerning history, geography, social life and customs and economy of the Central American countries
- Lauber, Patricia. The Congo. Garrard. 1964. \$2.19. 4-6. (Rivers of the world)
History of the exploration of the Congo River. Includes present day life along the river.
- Manton, J. The story of Albert Schweitzer. Abelard. 1955. 5-7.
An account of Albert Schweitzer from childhood to his work in Africa. Includes his winning of the Nobel Peace Prize in 1953. For able readers.
- Maziere, Francis. Parana, boy of the Amazon. Follett. 1959. \$2.25. K-3. (The world books)
Describes home, recreation, and training of a primitive Indian boy of South America
- Quinn, Vernon. Picture map geography of Africa. Rev. ed. Lippincott. 1964. \$3.02. 4-6.
Main sections of the continent are shown in pictorial maps. Describes briefly the people and their life.
- Sechriat, Elizabeth. It's time for brotherhood. Macrae Smith. 1962. \$3.59. 6-9.
See pages 86-97 for biographical information about Albert Schweitzer.
- Selsom, Millicent. Birth of an island. Harper. 1959. \$2.92. K-3.
An account of how a volcanic island evolves - its origin, weathering, and gradual invasion by living organisms
- Sperry, Armstrong. All about the jungle. Random. 1959. \$1.95. K-3.
Useful to help make comparison between rain forest and a jungle. Describes three main jungle regions - South America, Indonesia, and Africa.
- The Amazon, river sea of Brazil. Garrard. 1961. \$2.19. 4-6. (Rivers of the world)
Presents much helpful information in comparing rain forest and jungle. Takes reader on an imaginary trip up the Amazon.

Contents: What the Amazon is like; Treasure chest of the Amazon; The rain forest; Zoo in the jungle; Man against the forest; Conquest of the jungle.

Tooze, Ruth. Our rice village in Cambodia. Viking. 1963. \$2.81. 4-6. Author lived in Cambodia, and tells about two Cambodians - their homes, families, work and play, water buffalo, and daily living;

Uhl, Melven. About grasses, grains, and canes. Melmont. 1964. \$1.88. K-3. (Look, read, learn)
Tells about the cereal grasses, the canes, bamboo and some wild grasses

United Nations. Office of Public Information. Flag book of the United States. United Nations. 1963. \$1.90. K-7.
Flag of each member nation presented in color with half page of written description

Withington, William. Southeast Asia. Fidler. \$4.61. 5-7. (Life in other lands)
Comprehensive survey of countries of Southeast Asia. Includes Indonesia. Covers land, climate, social life and customs, industries, etc.

Yates, Howard. How people live in Central America. Benefic Press. \$2.24. 4-6. (Basic concept series)
Describes the countries and people of the area. Includes up-to-date information with maps, illustrations etc.

Films

African continent: tropical region. Coronet. 13 1/2 min. Purchase: b&w \$75, color \$150.
Presents tropical Africa - the Eastern Highlands, the great grassy Savanna, and the hot rain forests of the Congo Basin and Guinea Coast

Animals of the Indian jungle. Encyclopaedia Britannica Films. 11 min. Purchase: b&w \$60, color \$120; Rental: b&w \$3.50, color \$5.
The tropical rain forest of Eastern India is presented including representative animals - the tiger, the python, the cobra, the mongoose, the monkey, and the elephant. Shows pattern of survival.

The coastal lowlands of Central America. McGraw-Hill. 19 min. Purchase: b&w \$115, color \$230.
Shows how people live in lowlands of Central America. Shows land use practices

Food of Southeast Asia. Film Associates. 18 min. Purchase: b&w \$115, color \$200; Rental: \$12.50.
Southeast Asia, is a densely populated tropical region. Diet includes three staple foods: fish, rice, and vegetables. By following

the children of various families, the viewer sees how the staple foods are produced and how they reach the consumer.

Indonesia: the land and the people. Coronet. 13 1/2 min. Purchase: b&w \$75, color \$150.

Presents an overview of the climate, terrain, population density, the traditions, the crops, mineral resources, and transition to independence

Life in hot rain forests (Amazon Basin). Coronet. 13 1/2 min. Purchase: b&w \$60, color \$120.

Presents the life of a jungle boy and his family. Shows shelter, clothing, social life, and food gathering

Master farmer Kum Yeng. Embassy of Malaysia, 2401 Massachusetts Ave., Northwest Washington, D. C. 2008. 22 min. Free. (Book three months in advance.)

Film shows that the Federation of Malaysia has an agricultural economy based in a large measure on rice growing.

Nomads of the jungle (Malaya). United World Films Inc. 20 min. Purchase: b&w \$110.

Nomads who live in hot rain forests do not farm or build permanent dwellings. They use resources of the jungle for food and shelter. Occasionally, they visit the trading post and exchange their jungle products for metal imports, cotton, and other items.

A people of the Congo. (The Mangbetu) Encyclopaedia Britannica Films. 11 min. Purchase: b&w \$60; Rental: \$3.50.

Presents a study of a primitive people. Describes their activities: barter, ivory carving, home decorating, construction of musical instruments, and native dances.

Rice. McGraw-Hill. 26 min. Purchase: b&w \$100, color \$200.

Shows the importance of rice as the principal food for almost two-thirds of the world's people. Shows methods of planting, growing, harvesting, and processing this food. The viewer visits various countries that consider rice their main food source. Includes India, China, Vietnam, and Burma. Explains efforts being made to improve production.

Rice in today's world. Coronet. 11 min. Purchase: b&w \$60, color \$120.

Shows the importance of rice as a major food crop. Points out major rice-producing areas of the world with particular attention to the Orient. Explains importance of climate and geography in the

production of rice.

Rubber in today's world. Coronet. 11 min. Purchase: b&w \$60, color \$120.

Reviews history of rubber, covering primitive methods of manufacture and modern improvements through vulcanization. Includes sources and major steps in production.

Tropical mountain island - Java. United World Films, Inc. 20 min. Purchase: b&w \$110.

On this densely populated tropical volcanic island, most of the people are farmers. Rail lines connect farms with easport cities. Trains bring tea, kopak, rubber, cocoa, etc., from the mountain areas to sea level.

The tropical rain forest. Encyclopaedia Britannica Films. 17 min. Purchase: b&w \$90, color \$180.

Shows the relationship between the humid environment of the tropical rain forest and the plant and animal life found there

West Africa: tropical lowlands. McGraw-Hill. 15 min. Purchase: color \$180.

Shows the struggle of the nations in the tropical lowland - dense forests, deserts, language differences, and tribal loyalties

Filmstrips

African village near the equator. Curriculum Materials Corporation. Color. \$4.95. (Africa - equatorial and central)

Amazon village. Encyclopaedia Britannica Films. 51fr. Color \$6. (South America - eastern and southern lands)

Brazil: industries and products. Eye Gate. Color. \$5, with tape \$10. (South America: the ABC nations, Uruguay and Paraguay)

Children of Brazil. Eye Gate. Color. \$5, with tape \$10. (Children of South America.)

Equatorial Africa. McGraw-Hill. 35fr. b&w \$3.50. (Families of the world) Photographic story of a farm family in Equatorial Africa.

Honduras: a banana republic. Stanley Bowmar, Inc. Color. \$3. (Central and South America)

How we get our rubber. Stanley Bowmar Co., Inc. Key Productions. 42fr. b&w. \$4.

Shows where raw material comes from, how it is processed, the products that result and uses and importance of rubber in our lives.

Indonesia: products, customs and arts. Jam Handy Organization. 37fr.
Color \$5.95. (Australia, Indonesia and Philippines)

Indonesia: village and city life. Jam Handy Organization. 37fr. Color.
\$5.95. (Australia, Indonesia, and Philippines)
Shows both similarities and differences between life in Indonesia
and our own

Jose harvests bananas. McGraw-Hill. 40fr. Color. \$6.50. (Children of
Latin America series)

Life in Indonesia. McGraw-Hill. 40fr. Color. \$6.50. (Far East series)
Designed to give children an understanding and appreciation for
life in Indonesia

Life in tropical rain forest. Eye Gate. Color. \$5, with tape \$10.
(South America: a regional study)

The rain forest. Life Magazine. Color. Free with article. (Based on
article: "The World We Live In, Part XI")
Narration is for advanced readers. Teacher will need to simplify
captions.

The Republic of Indonesia. Eye Gate. Color. \$5 ea. Set of eight, \$40.
Designed to help children become acquainted with this region.
The historic background Agriculture
The land Other industries
The people Borneo, Celebes, and Bali
Culture, education, transportation Important cities

Rice: food of the Orient. Curriculum Materials Corporation. Color \$6.
Presents rice growing in Japan

South America: eastern and southern lands. McGraw-Hill. 51fr. Color.
\$6.
Amazon village

Story of Malaya and natural rubber. Audio Visual Associates, 805 Smith St.,
Baldwin, Long Island, New York 11512. Color. Sound. Free.
Tells about the growing and handling of rubber at the source in
Malaya and other countries of Southeast Asia. Includes something
about the people and their way of life on the rubber plantations.

The story of rubber. Curriculum Materials Corporation. Color. \$4.95.
(South America)

Treasure of the tropics. Association Films. 14 min. Color. Free.
Tells the story of growing bananas in the tropics of Central
America. Includes the effect of enlightened planning and local
cooperation on schools, housing, and standard of living.

The tropical rain forest. Eye Gate. Color. Set of six, \$30.

Programmed geography. The seven regions of the world series.

Presents the facts of intense heat, length of day and night, rainfall, humidity, and lack of seasons.

Records

Folk music of the western Congo. Folkways/Scholastic Records. 12 in.
33 1/3 rpm. \$6.79.

Music of Indonesia. Folkways/Scholastic Records. 2-12 in. 33 1/3 rpm.
\$13.58.

Sounds of a tropical rain forest in America. Folkways/Scholastic
Records. 12 in. 33 1/3 rpm. \$5.79.

West Indian folk songs for children. Folkways/Scholastic Records. 12 in.
33 1/3 rpm. \$5.79.

Tapes

Let's find out about water. Imperial Productions Inc. 15 min. \$3.75.

Teaches the pupil where water comes from, what its uses are.

Includes a presentation of the evaporation - condensation principle.

MOUNTAIN COMMUNITIES

Stating the Problem

- How do people in mountain communities meet their daily needs?
- To what extent have some mountain communities developed?

Understandings To Be Developed (Geography)

1. There are mountain ranges on all the earth's continents which can be located on the globe, flat maps and relief maps.
2. The major mountain ranges of the western hemisphere run from north to south, from Alaska to the southern part of South America.
3. The major mountain ranges of the Eastern Hemisphere run in a belt from west to east, going from Spain across southern Europe into Asia, Southeast Asia and to the Pacific coast.
4. The major mountain ranges of Africa run from north to south in the eastern part of the continent.
5. Internal pressure of the earth causes mountains.
6. Mountain ranges affect the climate of surrounding areas.
 - Winds are forced to rise to cross mountain areas, and as they rise the air becomes cooler, causing loss of moisture carrying capacity.
 - The windward side of mountains receive whatever rain is available; the leeward sides are the "rain shadow."
7. Weather and vegetation in mountain areas change as one goes higher up in the mountains.
 - The air becomes cooler at the rate of about 3° per thousand feet of elevation.
 - It is always cooler on the tops of mountains than in inter-mountain valleys.
8. The vegetation on mountains depends on the altitude and latitude.
 - In Africa and South America, some mountains have tropical rain forests at their base and rise so high that their top are completely treeless, and often snow-covered throughout the year.

- In high mountains, the lower parts may be completely forested, often with hardwood trees. Higher up, the trees become evergreens (as in the taiga); and still higher, the trees give way to shrubs and grasses until near the summit, which is usually snow-covered.

Information Needed (To Develop Understandings)

1. How are mountains formed?
2. Where are the major mountain areas of the world located?
3. Which type of map would be best for locating mountain ranges and why?
4. What directional patterns do these mountain ranges follow?
5. Why do winds crossing mountains become cooler?
6. Why do "rain shadows" occur on the leeward side of mountains?
7. Why is it cooler at the tops of mountains than at the bottom?
8. Why will no vegetation grow at the summits of high mountains?
9. Why are some high mountains covered with snow the year round while others are not snow covered?

Learning Activities (Geography)

1. Using a relief map, ask children to locate a mountain area and then define the word "mountain." Compare with dictionary definition and formulate a working definition for Social Studies notebook. Discuss also the term "mountain range."
2. Locate on a relief map, flat map, and globe the major mountain ranges on each continent. Children should decide which tool depicts mountain ranges easiest. Let children "feel" the mountain on a relief map.
3. Have children devise a symbol for mountains and, using transparencies or outline maps of the world, color in the major mountain areas. Review cardinal directions and have children discover the directional pattern of the Rockies and the Himalayas. Continue with the other ranges under consideration. List ranges in the Eastern Hemisphere and those in the Western.
4. View and discuss such filmstrips and "Mountains" (SVE 431-16 - \$6) "The Story of Mountains" (EBF 5196 - \$6) or "Mountains" (Eye Gate 81G - \$5). These would aid in your discussion of how mountains are formed.

5. Demonstrate the formation of mountains with the use of aluminum foil, a stack of colored paper, or dough. Push with fingertips the ends of the above materials which are flat on a surface. View the results of pressure (folding) and relate to mountain formation. Continue study with aid of such visuals as A. J. Nystrom's Geographic Terms Charts (46 charts #MS46 depicting many geographic features used at this and other grade levels - \$63.50). Additional material which may prove helpful is Denoyer-Geppert Geology Model for study of the earth (GEM051 - \$75) or Colored Slides Effects of Internal Forces (SVE 13 slides - \$5.25 - Accompanying Pictures and Study Prints - \$32.50 total).
6. Class may build and erupt a volcano using such aids as Denoyer-Geppert's Geographical Terms Chart (5100 x 14 - \$18.75) for reference with constructing model. Mold paper maché depicting the natural features of mountains (valleys, plateaus). Between two summits cut out a large enough area for a small tin can and insert. After painting model (which should clearly show timberline, snow peaks, etc.) spray entire model with a fire proofing spray. Place in the can a small amount of ammonia dichromate, a small piece of magnesium ribbon and for sound effects, some caps from a child's pistol. Ignite with a long match and note how resultant ash changes size of a mountain and reshapes it.
7. Able students may compare levels of elevation of major mountains or ranges and chart discoveries on illustrated bar or line graphs, (Mt. Everest, Mt. Kilimanjaro, etc.) *The Golden Geography* book p. 61 may be helpful. The nearest office of the Weather Bureau will send information telling the height of local community above sea level and this could be graphed also.
8. Use a fine spray and a hair dryer to "blow" a moisture cloud toward your model mountain. Note which side of mountain receives moisture. What effect would this have on vegetation? Define "windward" and "leeward."
9. An explanation of the decrease of temperature as one ascends a mountain could be as follows: have children imagine many layers of blankets spread over themselves and talk about how warm they would be. Then imagine only a few or one blanket layer over themselves - they would be cooler. There are many layers of air blanketing the earth near the bottom of a mountain, but, as one climbs higher, the layers of air are fewer and thus the summit is cooler than the base.
10. Show the topographical and geographical features of various ranges by discussing such filmstrips as "Modern Switzerland and Austria" (SVE - \$6.50) or "Rocky Mountains: A Geographical Region"; "Geography of Rocky Mountains." (These and the one following from Coronet Films - write to Syracuse Film Library for rental information); or "Geography of South America" (Coronet) or "High in the Himalayas" (National Film Board of Canada - 680 Fifth Ave., New York, N. Y.)

11. Arrange a bulletin board of mountain pictures and use such prints as "Children of South America, Children of Europe, Children of Asia" (Select appropriate regions involved - SVE \$8 set).
12. Seasonal changes and vegetation in mountain regions could be discussed after viewing such films as "Cycle of Seasons" (Information Services of India, film section, 2107 Massachusetts Ave., Northwest Washington, D. C.) or filmstrip "Mountains and Valleys in Switzerland" (Encyclopaedia Britannica - 6920 - \$6).
13. Make a chart comparing the mountain vegetation (latitude or altitude) in an area of low latitude with that of one in high latitude (for example, Mt. Kilimanjaro and Mt. Blanc). What vegetation may be found near the base of each (rain forest, forest, desert, etc.?) Show upward progression of vegetation.
14. Listen to educational tapes such as "Let's Find Out About the Earth's Crust" (Imperial Productions, Inc. - \$3.75).
15. Study the animal life of mountain areas by seeing such films as "Wildlife of the Rocky Mountains" (National Film Board of Canada (680 Fifth Ave., New York, N. Y. - rental \$6). Have pupils prepare individual reports on mountain animals (mountain goats, llamas, sheep, etc. Why are these animals good mountain stock?
16. Draw a class mural showing the vegetation, animal life, and land formations of a mountain range or mountainous area.
17. Children may imagine they are at the summit of a high mountain of their choice. Ask them to illustrate and explain what they see as they look downward, using correct vocabulary (plateau, summit, base, tree line, valley, etc.). Children may then tell in which hemisphere their mountain is located and name the range of which it is a part. They could describe the vegetation on the mountain and tell of climatic conditions there.
18. A large vocabulary chart for mountain study could be compiled, with terms suggested and defined by the children. An accompanying illustration of a mountain range might be drawn to indicate by yarn or arrow the examples of words defined (base, summit, "rain shadow," avalanche, tree line, plateau, glacier, valley, range).
19. Class may plant seeds and simulate some of the conditions of vertical zones of mountain vegetation by leaving one group in a warm, sunny, moist area (windward side), some in a warm, dry area (leeward side), some in a cooler place (near a basement window), and some, to represent summit conditions, in a cold, sunny place (perhaps outside in winter months).

Understandings To Be Developed (Social Organization)

1. Mountain dwellers live in family groups and most have community organizations similar to that of the local community (with schools, etc.).
2. Most mountain people have some sort of religious organization.
3. Some mountain communities, such as those in the western United States and Switzerland, are highly organized, modern cities and villages.
4. Some mountain communities, such as those in the Tibetan Plateau, are small villages, lacking organization and modern facilities.

Information Needed (To Develop Understandings)

1. Why do mountain people live in family groups?
2. Why do some people choose to live in mountainous areas?
3. What forms of religious organizations are found among some mountain people?
4. To what extent are some mountain communities socially organized?

Learning Activities (Social Organization)

1. Collect all available books, pamphlets, and other material from the school library and vertical file and arrange attractively in the room.
2. View and discuss such films as "Let's Be Friends in Switzerland" (BH 202 - 20 min. - \$7.50 - from Association Films - presents Swiss songs, folk tales, children), filmstrip "Anthony and Maria of Switzerland" (SVE 285-3 - \$6) or "Nils and Gretel of Switzerland" (Eye Gate - 47C - \$5), "Life in the Alps" (Coronet Films).
3. Stack cartons of decreasing sizes to simulate a mountain area. Build a small Alpine village at one level, showing location of homes, pastures and other main features. Details could be added such as a cable car (of milk cartons suspended on string) or model animals. Such films as "Alpine Village" (McGraw-Hill p. 14) or filmstrip "Children of Switzerland" (Encyclopaedia Britannica Films - b&w \$3) may be helpful.
4. Learn a Swiss song by listening to such records as "Mountain Songs" and "Yodeling of the Alps" (Folkways #8807 - \$4.25). A Swiss dance may be interesting to learn, such as "Three Leather Stockings" (use accompanying Folkdance record #1056) or "Weggis"

5. Send for free Teacher Kit on Switzerland (includes brochures, leaflets, pamphlets, posters; Swiss National Tourist Office, 608 Fifth Avenue, New York, N. Y.).
6. Children may dress in simple Alpine native costumes (colored suspenders, bermuda shorts, paper Alpine hats). Such aids as Continental Press (duplicator series "Children of Many Lands") may be colored by the children and used for reference.
7. Educational tapes such as "Sounds of Heritage" (done by the Swiss people in Wisconsin, State Historical Society of Wisconsin, 7 1/2 ips, 30 min.) may be heard and discussed.
8. Such pictures and articles as these in *National Geographic* may be used: "Alps" (Sept., 1965) "Switzerland" (June, 1955, Oct., 1956, and Aug., 1950).
9. Class may enjoy hearing or reading such books as *Heide* (by Johanna Spyri) or *Magic Meadow* (by Ingri d' Aulaire).
10. Individuals may report on some social and religious aspects of daily life in the Alps by reading such books as *My Village in Switzerland* (by Sonia Gidal) or *The First Book of Switzerland* (by Sam Epstein) or *My Daughter Nicola* (by Ruth Arthur).
11. Children could complete an outline map of Switzerland, noting large cities. Individuals could report briefly on some of these cities, including population, main industries, festivals, etc. Class discussion may evolve comparing urban and rural life in Switzerland and noting similarities or differences between these and life in the local communities.
12. View and discuss such films as "Banyam - Afghanistan Life" (Royal Afghan Embassy, 2341 Wyoming Ave., Northwest, Washington, D.C. 20008) or "Himalayan Heritage" (Sound - 20 min. - Information Service of India) or "Magic of the Mountains" (11 min - Information Service of India Film Section - 3 East 64th St., New York, N. Y. 10021) or "Our Neighbor Nepal" (also Information Service of India - address above).
13. Display and discuss such study prints as "Children of Asia" (SVE - \$8 - Children of the World Series).
14. Articles in such magazines as *National Geographic* ("Afoot in Roadless Nepal" - March, 1960) or "High Adventure in the Himalayas" (April, 1948, Oct., 1956) will provide information and photographs to depict the daily lives of some Himalayans. Also, one might use "Assam - Tibet" (March, 1952).
15. Listen to such records as "Folk Music of Kashmir" (#4350) or "Songs and Music of Tibet" (#4486 - both from Folkways, Inc.).

16. Be selective using filmstrips such as "Children of India" (Eye Gate - 149C - \$5) and discuss only those children from mountain areas, or use such filmstrips as "Family of Central Asia" (Encyclopaedia Britannica Films - \$6).
17. Such books as *Daughter of the Mountains* (by Louise Rankin) might be enjoyed by able students for understanding the life of a Tibetan girl.
18. Have children examine a world map to discover the lack of large cities in the Himalayas. Discuss why this might be so. Demonstrate on model mountain range the effect of such things as ruggedness of terrain, temperature, and lack of forestation on the development of large communities.
19. Mountaineering is depicted in such films as "Call of the Mountains" (Himalayas - Information Service of India - free) or "Third Man on the Mountain" (Walt Disney - WD 411 - rental \$27.50 - Film Associates - 107 min.).
20. Individuals may be interested in researching the conquest of Mt. Everest by man. As a reference one might use such articles as *National Geographic's* "Triumph of Mt. Everest" (July, 1954) or "Everest Expedition" (Oct., 1963) or "Everest" (Jan., 1961).
21. Children might read such books as *Getting to Know the Northern Himalayas* (by Lora Redford) or *Getting to Know the Central Himalayas: Nepal* (by Lora Redford) and discuss daily life of these people as it might be influenced by mountainous terrain.
22. The religious aspects of life in the Himalayas can be discussed after seeing such films as "Ladakhi"- the brotherhood of Llamas or "Cave Temples of India" - Hindu and Buddhist information or "The Holy Himalayas" all from the Information Service of India.
23. View and discuss such filmstrips as "Then and Now in the Rocky Mountains" (EBF - #5782 - \$6) "The Rocky Mountain Area: Backbone of the Nation" (#402170 - McGraw-Hill - \$7.50) or "Western Mountain Region" (#093100 - McGraw-Hill - \$6.75).
24. Individual reports on life in the Rockies may be made using such books as *The Rocky Mountains* (by Herbert Zim). Mountain life might also be described by a parent or friend who has toured the Rockies and is willing to tell class of his visit, show slides, etc.
25. Daily life in the Andes might be discussed after viewing such filmstrips as "Children of Peru" (Eye Gate - #165H of series 165 Children of South America - \$5.50) or "Life in Peru" (926 of Eye Gate series 92 - The Andes Nation) or film series "Along the Andes" (LBF - set of six, \$36) or "Salvdos Amigos" (Association Films Inc. - \$15 - rental film WD-395 - a gay and tuneful visit to Latin America).

26. Display such study prints as Children of South America (SVE - Children of the World Series - \$8).
27. Listen to such records as "The Music of Peru" (Folkways - 4415 - \$5.25).

Understandings To Be Developed (Economic Organization)

1. Mountain communities in undeveloped areas such as the Tibetan Plateau, parts of Spain, and in the South American Andes, have subsistence agriculture as their economic base of life.
 - The people of these areas live in little farming villages and work the surrounding fields.
 - They own a few grazing animals, such as sheep and goats, that provide meat, milk, and materials for clothing.
2. The economic base of life in many mountain communities is mining (as in western United States and in the Andes).
 - Mountain areas are often rich in minerals.
 - People are brought to work in the mines, and communities are formed with stores, businesses, and services to meet the needs of the people.
3. Some mountain areas, as in parts of western United States and Switzerland, have a mixed economic base - agriculture and manufacturing.
 - The grazing of cattle on mountain meadows is an important activity in these areas.
 - In Switzerland there are dairy cattle, and cheese is an important product, while in the United States, beef cattle are raised for meat.
 - Communities are located in the valleys of these mountain areas and provide needed economic services to the farmer.
 - Since a labor force exists in some of these communities, small manufacturing industries have developed (as has occurred in the watch and optical equipment industry in Switzerland).

Information Needed (To Develop Understandings)

1. Why do people in many parts of the world live by subsistence agriculture and provide their own clothing and other needs?

2. Why do people in undeveloped areas usually graze sheep and goats rather than cattle?
3. Why are some mountain areas rich in minerals?
4. Why are communities built near mines?
5. What stores and businesses would most communities need?
6. What are the natural features of mountainous terrain and where are they found on mountains? (meadows, valleys, plateaus, summit, etc.)
7. Why has it been possible to raise cattle in Switzerland and in the mountain areas of the United States?
8. Why have communities grown up in mountain farming areas and what services do they provide
9. Why do manufacturing industries grow up where a labor force exists?

Learning Activities (Economic Organization)

1. As a result of seeing films, filmstrips, pictures and researching for the previous social learnings, have children list the main occupations of mountain people in the Himalayas. Discuss reasons for limited subsistence farming.
2. Make a mural of a village in the Himalayas showing the economic-related activities (farming, herding, crafts). Later a companion mural of a Swiss Alps village will be made.
3. View and discuss such films as "Craftsmen of Kashmir" (Information Services of India film service - 3 East 64th Street, New York, N. Y. 10021).
4. Discuss the economic activities of the Swiss Alps region by viewing such films as "Switzerland - Life in a Mountain Village" (EBF - 14 min.) or filmstrip "Switzerland" (Jam Handy - #4 of series 1610). Compare the economic activities in these rural Swiss areas with those in urban areas by discussing such films as "Switzerland - The Land and Its People" (Coronet) or such filmstrips as "Modern Switzerland and Austria" (Rand McNally - #290-5 - \$6).
5. The types of economic activity in the Rocky Mountains could be shown by using such films as "Geography of the Rocky Mountains" (Coronet Films - 11 min.) or "Mountains of the West" (National Film Board of Canada) or such filmstrips as "Rocky Mountains - The Backbone of the Nation" (McGraw-Hill) or "Western Plains and Rocky Mountains" (#270-20 - SVE - \$6).
6. Discuss the natural resources and economic activities in the Andes

by seeing such films as "Life in the High Andes" (Coronet Films) or "Lands and People of the Middle Andes" (#259-30 - Rand McNally - \$6). Compare types of work done by people in the Rocky Mountain region with that done in the Andes and note the degree of development.

7. Make a product map of each region studied (the Himalayas, Andes, Rockies, Alps) and collect as many actual samples of these as possible.
8. Have a "Tasting Party" of typical foods produced by mountain people - Swiss chocolate, cheese, fruits, etc.
9. Prepare reports on animals of mountain regions and have children draw accompanying illustrations. Such books as *The North American Bighorn Sheep* (by Mary Adrian), *Hello South America* (by David Bowen), *Camels and Llamas* (by Olive Earle), *South America* (by Raymond Fideler) and, *Son of Candow* (by Claire Maizel) may be useful. Discuss the meaning of "sure-footed" and list animals which have this characteristic.
10. Send for travel posters and information from the Swiss National Tourist Office, 608 Fifth Avenue, New York, N. Y. 10020.
11. Have children act as travel agents and persuade others to vacation in their mountain region. Discuss why the tourist trade is important in mountain regions. Such books as *Let's Travel in Switzerland* (by Darlene Gees) or *Away to the Lands of the Andes: Columbia, Ecuador, Peru, Bolivia, Chile* (by Albert Nevins) may be useful.
12. Average readers would enjoy such books as *Three Boys and a Mine* (by Nan Hayden Agle and Ellen Wilson) and they will learn a good deal about modern mining methods. Others might read *The First Book of Mining* (by Patricia Markum) or *Underground Riches: the story of Mining* (by Walter Buehr).
13. Role play a situation in which the following occurs: Riches are discovered on a herder's land which is very far from any large community. What will the herder need to do to get people to help him mine the riches? (in addition to paying wages?) Compare solution with a second situation: A man has an idea for a new business. Nearby, to the east, is a small community of five families while to the west is a small city. Where is he likely to develop his business and why?

Understandings To Be Developed (Political Organization)

1. Mountain communities in undeveloped areas, such as in Central Asia, have very simple forms of government.

- In many such places, the tribal form of government prevails.
 - In some areas, such as the mountains of Tibet, religious leaders are sometimes also political leaders (Dalai Lama).
2. Mountain communities in more developed areas have governments similar to our own community.
 - In Switzerland and in western United States, local governments provide some services and local officials are elected.

Information needed (to develop understandings)

1. Why do undeveloped areas often have a tribal form of government?
2. Who are the leaders in undeveloped mountain communities?
3. Why do more highly developed areas have more advanced governmental organization?

Learning Activities (Political Organization)

1. Review the structure of tribal governments and ask children to decide which of the mountain regions under study (the Swiss mountain villages or cities, Tibetan villages, Rocky Mountain communities, Andes communities) may have a tribal type of organization.
2. Research in encyclopedia and other reference sources the political organization of each of these areas. Note the terminology unique to each (maharaja, president, mayor, chief, etc.).
3. View and discuss such films as "Switzerland" (Walt Disney - color - Association Films WX-516 - rental, \$10) especially for evidence of democratic organization and structure.
4. The dual role of political and religious leadership by the Dalai Lama is explained in such films as "Inside Tibet" (Association Films - 40 min. - rental, \$10).
5. Individuals might report on the Hindu or Buddhist religions, telling basic beliefs, holy books, etc.
6. Discuss such questions as "Why are many important meetings of nations held in Switzerland?" (Geneva Conferences, etc.)
7. Prepare a chart of the government organization of Switzerland showing the president, his council of seven men and the method of election (use word *canton*).

8. Children may write reports on the political leaders of mountain areas (maharaja, tribal chief in Nepal, Dalai Lama, Swiss president, governor of a state crossed by Rockies) and in each case tell the extent of his power, how he obtained his position, etc.
9. Role play situations in which children portray decision-making in each type of mountain government (for example: a tribal decision high in a Himalayan village, compared with one made in a small, watch making city in Switzerland).
10. Ask children to list the types of governmental services needed by people living in a large, modern Rocky mountain city (i.e. Denver, Colorado) compared with those of a tiny village in the Andes. Why would more services be needed in one than in the other?

Evaluation

- I. Pupil Self-Evaluation - see suggested form in Desert unit.
- II. A. Teacher Evaluation - see suggested form in Desert unit.
- B. Discussion Questions for Review:
 - . What is a mountain range and where are the major mountain ranges of the world?
 - . Describe mountain vegetation and the physical features of mountain terrain (valleys, plains, meadows).
 - . What types of family organization are found among mountain people?
 - . What animals are common to mountain regions and how are they used?
 - . What aspects of mountain areas encourage and/or discourage permanent settlement?
 - . What types of government are found in mountain areas and how are they alike or different?
 - . How do mountain people make a living?
- C. Other Evaluative Techniques
 - . Creation of multiple choice, short answer and matching tests (mastery of pertinent facts and skills).
 - . Organize a "Stump the Experts" game wherein panel members may remain on the panel only by satisfactorily answering

questions posed by the group.

. Suggested essay questions (to evaluate broad understandings):

- In what ways are all mountain areas alike?
- List the products of some mountain regions.
- Why are there fewer rules and regulations in a small village in the Himalayas than in a city in Switzerland?
- Imagine that your plane has made a forced landing on a mountain. Your family and others must remain there. What would you need and how would your group go about getting these things?
- Describe a typical day in the life of a Swiss watchmaker, a Rocky mountain miner, and Peruvian shepherd.

III. Cooperative Evaluation

- . How do people in developed mountain areas live? How do people in undeveloped mountain areas live?
- . To what extent is living in mountain regions difficult?
- . What makes some mountain regions valuable?
- . What activities did we enjoy most, least, and why?
- . Make a summary class mural (planned and drawn by committees) to show typical daily activities in each type of mountain region studied: a modern city (in Switzerland or the Rockies), a tiny mountain village (in Nepal); a mining town (in the Rockies); a sheep herding village (in the Andes).

Teaching Materials

Teachers' References

Books

Carte, George. Man and the land. Holt. 1964. \$9.95.

Periodicals

The National Geographic Magazine. National Geographic Society. \$8 yr.

Materials for Children

Books

Adrian, Mary. The North American bighorn sheep. Hastings House. 1966. \$2.76. 4-6. (Preserve our wildlife series)
Presents the life cycle of the typical bighorn sheep and explains why their preservation is important

Agle, Nan, & Wilson, Ellen. Three boys and a mine. Scribner. 1954. \$2.76. 1-3.
Part of a series about triplets. Factual information is woven into the plot.

Arthur, Ruth. My daughter Nicola. Atheneum. 1965. \$2.35. 4-6.
The story of a Swiss girl whose mother has died and who feels she must prove herself by boyish accomplishments - mountain climbing and exploring an abandoned mine. Shows life in Switzerland.

Aulaire, Ingri d'. The magic meadow. Doubleday. 1958. \$3. 2-4.
Describes life of Peterli and his grandfather - making cheese, herding the animals, and guiding tourists

Bishop, Claire. All alone. Viking. 1953. \$2.35. 4-6.
Story of Marcel and Pierre, who herd their family's cows on a slope of a mountain in the French Alps. Shows the interdependence of people.

Bowen, David. Hello, South America. Norton. 1964. \$3.73. 4-7.
A general introduction to the continent. Includes up-to-date information about economics, industries, problems of each country.

Chr, Walter. Underground riches; the story of mining. Morrow. 1958.

\$2.94. 4-6.

Describes man's need for metals and minerals and the methods developed for extracting them from the earth

Buff, Mary. The apple and the arrow. Houghton. 1951. \$7.57. 4-7.
The story of William Tell's fight for Swiss freedom

Caldwell, John. Let's visit Peru. Day. 1961. \$2.86. 4-6.
Presents through photographs and maps, a general introduction to the history, people, and customs of the country

Carigiet, Alois. Anton the goatherd. Walck. 1966. \$5. K-3.
Describes a day in the life of an Alpine goatherd. Portrays Swiss village and upland meadow life.

Chonz, Selina. Bell for Ursli. Walch. 1963. \$3.19. 1-3.
Story of a Swiss boy who lives in a tiny mountain village and of his adventure during the spring festival

Earle, Olive. Camels and llamas. Morrow. 1961. \$2.94. 2-5. (Morrow junior books)
An account of the camel as a beast of burden. Compares Arabian and Asian camels. Also describes their cousin the llama his life in the cold, thin air of the Andes.

Epstein, Sam. The first book of Switzerland. Watts. 1964. \$1.98. 4-6.
An introduction to Switzerland and the people who live there

Fideler, Raymond. South America. Fideler. 1965. \$4.08. 4-6.
Survey of geographical features, history, people, natural resources, occupations, transportation, communication, cities, arts, crafts, fiestas, sports, and important facts for each nation

Freeman, Don. Ski pup. Viking. 1963. \$3.37. K-3.
Story of Hugo, a big dog, who is trained to rescue lost skiers.

Geis, Darlene. Let's travel in Switzerland. Children's Press. 1964. \$2.37. 4-6.
Describes the people, their sports and festivals, agricultural and manufactured products, and the customs

Gidal, Sonia. My village in Switzerland. Pantheon. 1961. \$3.69. 4-6. (My village books series)
Describes daily life at home and at school. Some historical detail included. Map, glossary, p. 80.

Goetz, Delia. Mountains. Morrow. 1962. \$2.94. 2-4.
Gives the location and formation of the world's important mountains and how they affect man's way of life

Hoffman, George, & Hoffman, Viola. Life in Europe: Switzerland. Fideler.

1955. \$3.28. 4-8.

Uses photographs and brief text to describe the countryside and life of the people of Switzerland

Lauker, Patricia. Junior science book of volcanoes. Garrard. 1965. \$1.58. 2-5.

Describes the birth and behavior of many known volcanoes as well as the causes and results of eruptions

Lobsenz, Norman. The first book of East Africa: Kenya, Uganda, Tanganyika, and Zanzibar. Watts. 1964. \$2.65. 4-7.

Describes the peoples and the natural life of these countries

Maizel, Clarue. Son of Condor. Criterion Books. 1964. \$2.35. 4-6.

Miguel lives in the high Andes Valley of the Condor. He takes care of his father's llamas until his uncle takes him on a journey. During the trip he finds a piece of treasure of the ancient Incas.

Markum, Patricia. The first book of mining. Watts. 1959. \$1.98. 4-6. Short history of mining. Mines past and present are described.

Morgan, Dale. Life in America: the West. Fideler. 1958. \$3.28. 5-8. Uses photographs and brief text to give a superficial picture of the Pacific States

Morrow, Betty. See up the mountain. Harper. 1958. \$2.92. 2-5. A journey up a mountain, from the foothills to the frozen peak

Nevins, Albert. Away to the lands of the Andes: Colombia, Ecuador, Peru, Bolivia, Chile. Dodd. 1962. \$2.18. 4-6.

Survey of these countries including government, religion, social, and economic development

Pough, Frederick. All about volcanoes and earthquakes. Random. 1953. \$2.37. 4-6.

A simple, clear explanation of the causes, types, and effects of volcanoes and earthquakes

Rankin, Louise. Daughter of the mountains. Viking. 1948. \$3.19. 4-6. Story of a Tibetan girl who travels from her mountain home to Calcutta in search of her stolen dog

Redford, Lora. Getting to know the central Himalayas: Nepal, Sikkim, Bhutan. Coward. 1964. \$2.52. 2-5. (Getting to know books)

Travelogue describing native children in their daily activities. Includes information on geography and history.

Redford, L. B. Getting to know the northern Himalayas: Kashmir, Tibet, Assam. Coward. 1964. \$2.68. 2-5.

Describes the old and modern worlds. Includes native children in daily activities and information on geography and history.

Rubicam, Harry. Men at work in the mountain states. Putnam. 1960. \$2.40. 4-6.

Includes the occupations and industries of Arizona, New Mexico, Utah, Colorado, Nevada, Idaho, Wyoming, and Montana

Smith, Frances. The first book of mountains. Watts. 1964. \$2.65. 5-7.

Explains the influence of mountains on weather and climate, on people and on plants and animals. Useful to show why people in mountain communities live the way they do.

Soni, Welthy. Getting to know the river Ganges. Coward-McCann. 1964. \$2.52. 4-6.

Traces the Ganges from Calcutta to its source in the Himalayas. Gives glimpses of life along the way.

Sotomayor, Antonio. Khasa goes to the fiesta. Doubleday. 1967. \$3.25. 1-3.

Picture book presentation of Bolivian life. Khasa is most anxious to go to the fiesta and play panpipes for the dancing but the loss of his front teeth makes practicing very hard. Has large pictures of life in Bolivia.

Spyri, Johanna. Heidi. Grosset. 1945. \$3.05. 4-6.

The story of a Swiss girl who goes to live with her grandfather on the mountain and then must leave him to go to take care of a sick child in town

Surany, Anica. Ride the cold wind. Putnam. 1964. \$3.29. K-2.

Story of a Peruvian Indian shepherd boy who longs to escape the boredom and become a fisherman

Werner, E. J. The golden geography. Golden Press. 1952. \$2.99. 3-6.

Introduction to the earth and the people who inhabit it. Explains how different environments affect life.

White, A. T. All about mountains and mountaineering. Random. 1962. \$2.37. 5-7.

Presents the history of the formation of the Alps, Rockies, Andes, and Himalayas and the men who explored the major peaks

Zim, Hervert. The Rocky Mountains. Golden Press. 1964. \$2.99. 4-6.

General description and brief history of the region. Information about animals, plants, natural wonders, places to see, and recreation areas.

Films

Alpine village. McGraw. 31 min. Purchase. b&w \$150, color \$275.

Shows how a small village high on the slopes of the French Alps has adapted to its environment

And now Miguel. United World. 63 min. Rental: University of California, \$6, Michigan University, \$7.75.

Story of an American family in the Southwest to whom the traditions of sheepraising have come down through generations from Spanish ancestors. Portrays this family life and the fulfillment of young Miguel's dream of being accepted on an equal footing by his father and older brothers.

Bamyan. Royal Afghan Embassy, 2341 Wyoming Avenue, Northwest, Washington, D. C. 20008. 15 min. Free.

Presents the beauty of Afganistan and shows glimpses of the life of the people.

Birth and death of mountains. Film Associates. 11 min. Purchase: b&w \$70, color \$135. Rental: University of Michigan, \$4.

Complex, unending cycle of erosion and uplift of mountains through animation and real examples. Effects of wind, water, ice, and underground forces.

Birth of a volcano. Sterling. 10 min. Rental: State University Film Service, b&w \$1.40.

Start of Paricutin in Mexico; its growth and eruptions. Close-ups inside crater.

Call of the mountains. Information Service of India, Film Section, 3 East 64th St., New York, N. Y. 10021. 18 min. (Shipped by express collect)

Presents the Himalayan Mountaineering Institute at Darjeeling which encourages mountaineering

Cave Temples of India (Buddhist). Information Service of India, Film Section, 3 East 64th Street, New York, N. Y. 10021. 10 min. (Shipped by express collect)

Shows the Buddhist Cave Temples of India

Cave Temples of India (Hindu). Information Service of India, Film Section, 3 East 64th Street, New York, N. Y. 10021. 10 min. (Shipped by express collect)

Children of the Alps. Encyclopedia Britannica. 13 min. Purchase: b&w \$60.

Includes family life, school life, and winter fun of Swiss mountain children.

Children of Switzerland. Encyclopaedia Britannica. 11 min. Purchase: b&w \$60; Rental: State University Film Service, \$2.

Life of a boy and girl who live in a pastoral region of the Swiss Alps. Includes view of the village, their home, and the summer pasture in the mountains.

Craftsmen of Kashmir. Information Service of India, Film Section, 3 East 64th St., New York, N. Y. 10021. 30 min. (Shipped by express collect)

Shows the crafts, such as embroidery and tapestries, of the people of the Valley of Kashmir as well as the scenic beauty

Cycle of seasons. Information Service of India, Film Section, 3 East 64th Street, New York, N. Y. 10021. 30 min. (Shipped by express collect)

Shows the cycle of seasons in India. Includes the monsoon, the cyclonic winds in the eastern and northern regions, and the snowfall in the Himalayas.

Earthquakes and volcanoes. Film Associates. 14 min. Purchase: b&w \$75, color \$150; Rental: University of Michigan, \$4.50.

Movements of the earth's crust which cause earthquakes; relation of faults to volcanic eruptions

Geography of the Rocky Mountain states. Coronet. 11 min. Purchase: b&w \$60, color \$120.

Introduces such geographic terms as system, peak, and plateau as well as illustrating grazing, irrigation, farming, mining, and lumbering in the Rocky Mountain states

Geography of South America: countries of the Andes. Coronet. 11 min. Purchase: b&w \$60, color \$120.

Shows views of the mountains and the highlands. The people are seen against a historical and geographical survey of Bolivia, Ecuador, Peru, and Chile.

High in the Himalayas. Association Films, Inc. 27 min. Color. Free.

A motion picture of a mountain climbing expedition, led by Sir Edmund Hillary. The expedition brought running water to a native village. Takes place on Mount Toweche near the Tibetan border.

Highlands of the Andes - Peru. United World. 20 min. Purchase: b&w \$110; Rental: State University Film Service, \$3.50.

Shows the difference in the kind of life led by the Peruvian Indian doing his best to eke out a bare subsistence from meager crops and a few domestic animals, and that of the Indians who work in the operations of the mines.

Himalaya - Life on the roof of the world. Atlantic Productions, Inc. 22 min. Rental: University of California, \$6.

Surveys the Himalaya Mountain civilization as tempered by influences from Tibet, India and Persia, with emphasis on Kashmir, Sikkim, Nepal and Assam. The comparative treatment of the geological history, geography, climate, economy, religions, and peoples of the Himalayas.

Himalayan heritage. Information Service of India, Film Section, 3 East 64th St., New York, N. Y. 10021. 20 min. (Shipped by express collect)

Film shows how the Himalayas have influenced the art, literature, mythology, and lives of the people of India

Holy Himalayas. Information Service of India, Film Section, 3 East 64th St., New York, N. Y. 10021. 11 min. (Shipped by express collect)
Portrays a pilgrimage to Kedarnath and Badrinath in the Himalayan ranges.

Inside Tibet. Association Films. 1950. 40 min.
Motion picture of the Dalai Lama, boy ruler of the country.

Ladakh. Information Service of India, Film Section, 3 East 64th St., New York, N. Y. 10021. 15 min. Color. (Shipped by express collect)
Includes the religious life of the monasteries and the brotherhood llamas as well as the life and occupations of the people of Ladakh.
Also shows a Ladakhi marriage.

Let's be friends in Switzerland. Association Films Inc. 23 min. Purchase: color, \$150; Rental: \$7.50.
Presents Swiss songs and folk tales through puppets, drawings, and moving characters

Life in the Alps. Coronet. 11 min. Purchase: b&w \$60, color \$120; Rental: University of Michigan, \$4.
Includes haying, gardening, lumbering, and cattle grazing. Illustrates the seasonal movement of cattle and sheep in order to adapt to the difficult and challenging terrain.

Life in the Andes. Coronet. 11 min. Purchase: b&w \$60, color \$120; Rental: b&w \$3.50, color \$5.
Shows how life in a high mountain region is affected by altitude and climate. The Indian family shown lives in a mountain valley in Peru where farming, grazing, and weaving are important. Depicts influences of the ancient Incan civilization.

Life in mountains (Switzerland). Coronet. 11 min. Purchase: b&w \$60, color \$120.
Presents a Swiss family in the Alps, caring for their cattle and goats, tending their garden, making cheese

Life on a sheep ranch. Coronet. 11 min. Purchase: b&w \$60, color \$120.
Andy, the son of an owner of a sheep ranch in Colorado, lives with the sheep herder on the mountain for the summer. Also illustrates other activities of sheep ranching.

Magic of the mountains. Information Service of India, Film Section, 3 East 64th St., New York, N. Y. 10021. 11 min. Color. (Shipped by express collect)
Shows the valley of Kashmir, the four seasons

Mining. United World. 20 min. Purchase: b&w \$110.
Shows the many important methods of mining the major classes of minerals. Includes men at work in the iron mines of the Mesabi Range, the coal mines of England and Western Europe, the mines in the High

Andes, and the shaft mines of the Rand in South Africa.

Mountain farmers (Switzerland). United World. 20 min. Purchase: b&w \$110; Rental: State University Film Service, \$3.50.

Includes the Swiss farmers who raise grains, fruits, and vegetables on small mountain farms; those that graze cattle on high grassy slopes and also the industries of dairying, manufacturing, and tourism.

Mountains. Barr Films. 10 min. Rental: University of California, \$4.

Taken in the mountains of California, the film shows typical trees, plants, and animals and views of mountains and mountain terrain. Excellent shots of deer and other native animals included.

Mountains. Gateway. 10 min. Rental: University of Michigan, \$2.25.

Mountains as a source of lumber, meat, water, and recreation. How mountains are formed; how they differ from other kinds of land; the timberline; lumbering; mountain animals; birth of rivers; cattle and sheep; forest rangers.

Mountains of the West. National Film Board of Canada. 19 min. Purchase: b&w \$90.

Shows the influence of the geographical environment upon industries and occupations. Uses animation to show the geological evolution of mountain ranges.

Our neighbor Nepal. Information Service Of India, Film Section, 3 East 64th St., New York, N. Y. 10021. 12 min. (Shipped by express collect)

Shows the people, rulers, homes, and palaces of Nepal.

Peru. McGraw. 17 min. Purchase: b&w \$100, color \$200.

Begins with an Indian shepherd boy high in the Andes. Shows the life of his village and family. Ends with his visits of Cuzco, a market place; Machu Picchu, the lost city of the Incas; and Lima, the capital of Peru, where his brother and sister have gone to work.

The Rocky Mountain area: backbone of the nation. McGraw. 16 min. Purchase: b&w \$90, color \$180.

Shows the importance of the Rocky Mountains to the people of the United States. Includes logging and mining operations. Shows how dams have been built to store water for irrigation and hydro electric power. Also shows views of national parks found in the Rockies.

Rocky Mountains - a continental divide. Carr. 20 min. Color. Rental: University of Michigan, \$7.

Origin of the Rocky Mountains; adaptations of plant and animal life at various altitudes; fossils; vertical rock formations: evidences of glacier and volcanic action.

Rocky Mountains: a geographic region. Coronet. 11 min. Purchase: b&w \$60, color \$120.

Photographed in Alaska, Canada, and the Rocky Mountain states, this film presents a geographic overview of the Rocky Mountains.

Saludos Amigos. Association Films. 42 min. Color. Rental: \$15.

A tuneful visit to Latin America including a Brazilian parrot and a mail plane.

Switzerland. Association Films. 30 min. Color. Rental: \$10.

Shows the spirit which has molded Switzerland into a stronghold of democracy.

Switzerland: the land and the people. Coronet. 11 min. Purchase: b&w \$60, color \$120.

Pictures progressive Switzerland including the mountains with their grazing, lumbering, watchmaking, and tourist industries; and the manufacturing region; and commerce and banking areas.

Switzerland - life in a mountain village. Encyclopaedia Britannica Films. 14 min. Purchase: b&w \$75, color \$150; Rental: b&w \$4, color \$6.50.

Presents rural Switzerland - its rugged geography and the way of life in a Swiss village.

Third man on the mountain. Association Films. 107 min. Rental: \$27.50.

Motion picture drama of an Alpine adventure of Swiss mountaineers. Photographed in Switzerland.

Wildlife of the Rocky Mountains. National Film Board of Canada. 9 min.

Purchase: color \$100; Rental: \$6.

Shows wildlife found in the Banff and Jasper National Parks of Canada. Includes closeups of deer, moose, bear, bighorn sheep, birds, and small animals that live above the tree line.

Filmstrips

Anthony and Maria of Switzerland. Society for Visual Education. Color.

\$6. (Boys and girls of many lands)

Describes living amidst glaciers, pasture land in the eastern Alps.

Children of America. Eye Gate. Color. \$5 each, with tape \$10 each.

The following filmstrips from this above set are useful in the mountain unit:

Children of Bolivia
Children of Colombia
Children of Ecuador
Children of Peru
Children of Venezuela

Children of India. Eye Gate. Color. \$5 ea. (Children of South East Asia and the Soviet Union)

Presents the daily lives of the children of India

Children of Switzerland. Encyclopaedia Britannica. 70 fr. b&w \$3.
(Children of many lands)

Shows Swiss children as they hike up a mountain to summer pastures where the men are tending the cattle. The series is designed to teach intercultural understanding and show the varied interrelationships between man and his environment.

Family of Central Asia. Encyclopaedia Britannica. 49 fr. Color. \$6 ea.
(Families of other lands)

The filmstrip centers around a child of the country to show the religion, games, entertainment, food, clothing, and homes of the country. Maps are used to locate the area.

Lands and people of the middle Andes - Ecuador, Bolivia, and Peru. Society for Visual Education. 57 fr. Color. \$6 ea.

Shows colorful life in tropical forest, high plateaus, and deserts. Also includes modes of living in ancient and modes of living in ancient and modern cities.

Lands and people of northern South America - Columbia, Venezuela, and the Guianas. Society for Visual Education. 49 fr. Color. \$6 ea.

Life in the mountains, difficulties of transportation, mineral resources

Life in the high mountains. Eye Gate. Color. \$5 each, with tape \$10.
(South America: a regional study)

Includes the industries and way of life in the mountain areas.

Modern Switzerland and Austria. Society for Visual Education. 60 fr.
Color. \$6.

Describes Switzerland's agriculture, transportation, power, industry and cities; also Austria's agriculture and cities.

Mountain building. Eye Gate. Color. With record and manual \$10. (Earth science)

Uses pictures to illustrate geographic terms.

Mountains. Eye Gate. \$5 ea. (Earth, home of man)
Shows how geography affects other everyday life.

Mountains. Society for Visual Education. 46fr. Color. \$6 ea. (Physiographic changes)

Shows how mountains are formed and arranged into chains, how they appear and disappear, how they reveal the history of the earth.

Nils and Gretel of Switzerland. Eye Gate. Color. \$5 ea. Teach-a-tape, \$4.25 ea. (Children near and far)

A visit to the homes and surroundings of Swiss children.

Plants and animals of the mountains. Society for Visual Education. 30 fr. \$5 ea. (Plants and animals)

Identifies characteristics, homes and living habits of plants and animals in mountain areas of the United States

The Republics of South America: the Andean Nations. Eye Gate. Color. \$5 each, with tape \$10. Set of nine, \$39, with tape \$79.

Colombia - gateway to South America	Venezuela - land of progress
Colombia - people and occupations	Peru - land of progress
Cities of Colombia	Life in Peru
Venezuela - cradle of liberty	Ecuador - land of the equator
	Bolivia - land in the sky

Robe's Alpine summer. Educational Visual Aids. 45 fr. Color. \$6.50 ea. (Children of Europe series)
Contemporary story of life in another country

The Rocky Mountain Area: backbone of the nation. McGraw. 42 fr. Color. \$7.50 ea. (United States Geography - social studies series)
Develops an appreciation of the interests, activities, and problems of the people living in this area and how they use the resources at hand. Maps are used for illustration.

South America: along the Andes. Encyclopaedia Britannica Films. Color. \$6 ea. Set of six, \$36.

The new Venezuela	Inca lands in Peru
Mountain farmers of Colombia	Highland people of Bolivia
Along the Equator in Ecuador	Pan-American Highway

The story of mountains. Encyclopaedia Britannica. 50 fr. Color. \$6 ea. (The earth and its wonders)
Presents the processes of faulting and folding in building mountains.

Switzerland. Jam Handy. 37 fr. Color. \$5.95 ea. (European lands)
Presents the present-day life and work of the people through detailed maps and art work. Emphasizes the interdependence of nations.

Then and now in the Rocky Mountains. Encyclopaedia Britannica. 43 fr. Color. \$6 ea. (Then and now in the United States)
Presents a comparison of early days in America with contemporary life. Uses paintings and maps to illustrate geography and economy of the area.

The Western Mountain regions. McGraw. 42 fr. Color. \$6.75 ea. (Canadian regional geography series)
Uses photographs and maps to illustrate the topography, climate, economy, human, and natural resources of the area

Western plains and Rocky Mountains. Society for Visual Education. 55 fr. Color. \$6 ea.

Presents an introduction of contour planting and the production of farm crops, cattle, petroleum, and natural gas

Records

Folk dances of the people. Educational record sales. 4-10 in. 78 rpm. \$7.50.

Authentic folk dances of France, Italy, Switzerland, Denmark, Sweden. Instructions included.

Folk music of Kashmir. Folkways Records. 1-12 in. LP. \$6.79.
Himalayan songs and dances

Instructional folk dances. Album A. Educational record sales. 4-12 in. 78 rpm. \$8.

Album A (simple folk dances): Minuet, Lassie Dance, Dutch Couples, Swiss May Dance, Tantoli, Good Night Ladies, Come Let Us Be Joyful, Shoemaker's Dance

Mountain songs and yodeling of the Alps. Folkways Records. 1-12 in. LP. \$5.79.

Played and sung in German

Music of Peru. Folkways Records. 1-12 in. LP. \$6.79.

Musical examples of three geographical areas: lowland, plateau, and Lake Titicaca

Songs and dances of Switzerland. Folkways Records FW 6807. 10 in. 33 1/3 rpm. \$4.25. (International series)

Recorded "on the spot" - folk dance music, traditional songs, yodeling, and village orchestras

Songs and music of Tibet. Folkways Records. 1-12 in. LP. \$6.79.

Includes dance, shepherd songs, and religious chants

World of fun recordings #1. Children's Music Center. 1-12 in. 78 rpm. \$2.

Includes: Cshebogar (Hungarian)
Kalvelis (Lithuanian)
Hol-di-ri-di-a (Swiss)
Seven Steps (Austrian)

Instruction sheet included.

Tapes

Let's find out about the earth's crust. Imperial Productions, Inc. 15 min. Each tape with teacher's guide, \$3.75.

Explains the stratification of the earth's crust, and the cause of landforms such as hills, valleys, mountains, and plains

Sounds of heritage #6 (The Swiss people of Wisconsin). State Historical Society of Wisconsin. 30 min. Tapes, 816 State Street, Madison, Wisconsin 53706.

Tells of Swiss immigration to Wisconsin; especially New Glarus which is a large Swiss cheese producing area

Pictures

Children of Asia. Society for Visual Education. Set of eight study prints, \$8. (Children of the world)

Aung of Burma
Haruko of Japan
Ali Wang of China
Shao Yuan of Hong Kong

Ranjit of India
Uipha, girl of Thailand
Ali of Saudi Arabia
Ziva of Israel

Children of Europe. Society for Visual Education. Set of eight study prints, \$8. (Children of the world)

Piet of the Netherlands
Jean-Pierre and Nicole of France
Emilio of Spain
Hanna and Andrzej of Poland

Franz of Austria
Sigrid of Sweden
Sofi of Lapland
Anna of Germany

Children of South America. Society for Visual Education. Set of eight study prints, \$8. (Children of the world)

Suka of Peru
Caya of Ecuador
Tomasia of Bolivia
Manuelo of Venezuela

Joan of Colombia
Jorge of Chile
Takuma of Brazil
Jose and Ernesto of Argentina

Slides

Effects of internal forces. Society for Visual Education. Color. \$.60 ea. Set of 13, \$5.20.

Fault Scarp
Grand Teton Mountains
Syncline in mountain side
Mount Shasta (California)
Air View, Volcanic Formation of
Hawaiian Islands
Air View, El Misti Crater (Peru)

Popocatepetl Volcano (Mexico)
Paracutin Volcano (Mexico)
Volcano in Eruption
Mt. Vesuvius, Pompeii
Devil's Tower, Neck (Wyoming)
Ship Rock, Neck (New Mexico)
Devil's Slide, a Dike

Charts

graphical terms chart. Denoyer-Geppert. 1 chart 64" x 44". \$18.75.

Landscape section only with glossary of 150 terms defined.

Map symbols and geographic terms charts. A. J. Nystrom. 46 charts.

18 1/2" x 24". Set of 26 charts in easel with teacher's guide, \$63.50.

Only one or two related geographic concepts are presented on any one chart.

Teacher kit on Switzerland. Swiss National Tourist Office, 608 Fifth Ave., New York, N. Y. 10020.

Includes assortment of brochures, leaflets, and pamphlets

Model

Geology models. Denoyer-Geppert. 4 models 12" x 15". Set of 4 models, nos. 1. 2. 3. 4. with study guide, \$75.

Each model shows surface formations and subsurface structures.

Can be used for classroom instruction and by individuality.

GRASSLAND COMMUNITIES

Stating the Problem

- How do people live in the grassland areas of the world?
- Why are some grassland areas the most productive farming lands in the world?

Understandings To Be Developed

1. There are extensive areas of grassland on all the earth's continents; they may be located on vegetation maps.
2. Most large grasslands are in the mid-latitudes except for those in Africa and Australia.
3. Climate is largely responsible for the creation of grasslands.
4. Grassland areas are low in total rainfall, thus discouraging the growth of trees.
5. Some grasslands have sufficient rain to grow tall grass; in more arid grasslands, the grass grows in short bunches.
6. Grasslands have low total rainfall because they are so located that moisture-bearing winds from the oceans do not blow over them.

Information Needed (To Develop Understandings)

1. What is a grassland and where are the extensive grasslands located?
2. What kind of maps could best be used to locate grasslands?
3. Why do grassland areas have low total rainfall?
4. Why do few trees grow in grassland areas?
5. Why do some areas have more and taller grass than others?

Learning Activities (Geography)

1. Have children suggest definitions of the term grassland and possible vegetation found there. Compare these ideas with actual grassland areas as shown in such filmstrip sets as "The Mid Latitude Grasslands" (Eye Gate #187C set of 6 filmstrips - \$30).

2. Locate grasslands on such maps as Rand McNally's World Portrait Map (PM 923) or vegetation map. Children might complete outline maps of world, coloring in grassland areas. Note location with reference to latitude.
3. Use a world average annual rainfall map such as (P90 by Denoyer-Geppert - \$11.25) and note the amount of rainfall in each of the major grassland areas. Construct a bar or line graph showing these results.
4. Invite a local florist or nurseryman to explain to the class the conditions necessary for the growth of a tree as compared with those for growing grass. With this information and the rainfall maps at hand, children should be able to explain why grasslands are treeless. They might also suggest why grass grows taller in some areas than in others.
5. Examine a relief map for the location of the grasslands in relation to the mountain ranges. Why would moisture-bearing winds from the oceans not reach the grasslands?
6. View and discuss such filmstrips as "Greenlands" (SVE filmstrip 259-1 - \$6) or "Let's Explore Lawn" (SVE 469-4 - \$6) for additional background on the causal aspects of the geography of grasslands. List and plant, if possible, several types of grasses. Record the amount of water needed for each to survive and the coarseness of each. Use the book *Grasses*, by Eberle, for reference.
7. Begin a vocabulary chart for the study of grasslands and especially include those words synonymous with the term "grasslands" - (plain, prairie, meadow, pampa).
8. Collect pictures of grassland scenes and frame them between mountain ranges with arid bases on one side and more moist, forested regions on the other.
9. Collect as many globes as possible and let children take an imaginary trip through the grassland areas of the world, naming the continents on which they are located and the general latitude in which each is found (mid, low, etc.). Suggest the type of climate each grassland area might have.
10. Locate on outline maps the major cities of the grasslands throughout the world. Children should suggest modes of transportation between some of these cities and explain why a mode named is appropriate (automobile: because flat terrain is easily traversed, etc.). Examine a road map for main routes between two major grassland cities and note also any railroad connections.
11. Class may plan and draw a large chalkboard grassland settlement, deciding what natural features would determine an optimum location

for city or farm (accessibility to water).

12. Children will discover that the grassland area of the U.S.S.R. has been called the "Black Soil Belt" or "Black Earth Region." Speculate why this name is used to describe the area. Collect types of soil (sandy, gravel, clay, topsoil) and decide which soils may support grassland life. Plant grass, wheat, corn seed in each and compare sprouting time, and care required for growth in each soil type.
13. Using outline map transparencies of the same scale, mark the black soil region of Russia and the plains area of the United States. Superimpose one on the other for size comparison. Remind children of the various climatic regions within each country (the desert and mountain areas of the United States, and the taiga region of Russia) to therefore avoid generalizing about the geography, vegetation, and climate of an entire country.

Understandings To Be Developed (Social Organization)

1. Tropical (low latitude) grasslands in Africa and Australia are very sparsely settled.
2. People who live in much of the undeveloped grasslands areas of the world are nomadic herders who move often, taking all of their possessions with them.
 - Family ties and relationships are very important to these people, but they have little else in the way of social or community organization.
 - They do have some form of religious belief, as do most people.
3. Midlatitude grasslands (the pampas of South America, the plains of the United States, and the "black soil" region of western Russia) have many permanent communities and more extensive social organizations.

Information Needed (To Develop Understandings)

1. Why do some grassland people live a nomadic life?
2. Why do grassland nomads, as well as most people everywhere, live in family groups?
3. Why do communities of nomadic peoples have few social organizations?
4. Why do nomadic people, as well as most people everywhere, have some form of religious belief?

5. Why are permanent communities found in some grassland areas?
6. Why would one find more social organization in permanent communities?

Learning Activities (Social Organization)

1. Collect all books and materials available about the grasslands of the world. Plan cooperatively what class would like to learn about people of the grasslands and set up committee work plans.
2. Examine a world population map (such as Denoyer-Geppert's population map P9D or Rand McNally's Population Density Map WG906P) and discuss which grassland areas are more populated than others. Speculate as to possible reasons for differences in population.
3. View and discuss such filmstrips as "Life on a Prairie (U.S.)" (SVE 469-4) or such films as "Life in the Grasslands (Argentina)" (Coronet Film) or "Life on the Farm" (EBF #7680 - set of six filmstrips) or "European Russia and the Ukraine" (Jam Handy - record and filmstrip from series "The Soviet Union Today"). Be selective in frames pertaining to grassland areas. Consider all three areas in the above films and note similarities or differences in social organization of these three peoples (U.S., Argentina, U.S.S.R.).
4. Have children suggest the types of homes grasslands people may have and the materials available for such homes, (sod house, tepee, etc.). Consider both isolated and populated areas for homebuilding. Construct a model rural farm and nearby town. Compare relative size and openness of a ranch with more limited and fenced-in farm.
5. Make a comparison between life on an Argentine pampa and on the U.S. grasslands by reading such books as *The Land and the People of Argentina* (by Elvojean Hall). Similarly compare grassland life in the U. S. with that in an African grassland area by reading *Visit to a Chief's Son* (by Robert Halmi).
6. Typical clothing of children in Argentina, United States, and Russia is shown in Continental Press "Children of Many Lands" prepared duplicator set. Children may color these and use in individual reports or as models for making stick puppets.
7. Children might suggest the types of food people in grassland areas may grow and how they might obtain other foods. Relate animals common to grassland areas (especially cattle) to this study. Individuals might research encyclopedias and reference books for food of particular areas under study (Argentina, Ukraine, U. S. plains areas). A discussion of such study prints as "Farm & Ranch Animals" (SVE SP 106) or Teach-A-Chart "Farm Animals" (Eye Gate - #C-101) may be helpful.

8. View and discuss such filmstrips as "The Children of Argentina" (Eye Gate - 165A, or Eye Gate series 137 "South America"). Note daily activities of children of Argentina. Compare these concepts with the daily lives of children of Russia after discussing such filmstrips as "The Children of Russia in Europe" (Eye Gate 149A).
9. Listen to and compare the music of each area studied using such albums as "Music of the Ukraine" (#4443) "Argentine Folksongs" (6810) and "The Cowboy-His Songs, Ballads and Brag Talk" (5723), all Folkways Records.
10. Display items used by cowboys or gauchos (lasso, bola, spurs, branding iron, farm tools, toy tractor, etc.).
11. Invite a member of the 4H Club or Future Farmers of America to speak to the class about caring for ranch animals. This talk may also include ideas for planning a Country Fair.
12. Plan and participate in a County Fair, dressing in appropriate western apparel and sharing western songs, square dances (Virginia Reel, Badger, All American Promenade) and refreshments. Pets, handicrafts, and homemade baked goods could be judged and awarded ribbons.
13. Individuals may report after reading such *National Geographic* articles as "South in the Sudan-Zebu Cattle" (Feb. 1953) or may research information on the Masai tribe in central Africa. Reports may be prepared on the nomadic life of animal raisers in Mongolia and Africa. Such books as *Thirty-one Brothers and Sisters* (by Reba Mirsky) may help.
14. View and discuss such filmstrips as "The Land," "Agriculture," "Livestock" of Argentina (#164B, 164C, 164D - Eye Gate) with particular emphasis on the similarities to modern Western United States. Study prints such as "Australia-New Zealand-Oceania." (A.J. Nystrom & Co. - set of 7 TG10) may be helpful.
15. Children might role play situations in which the daily life of a nomadic herder (as in Mongolia or Africa) is portrayed. The vastness of the land, feelings of loneliness, activities to occupy free time, daily responsibilities could all be emphasized as they relate to the herder, his wife, his children and to the family unit. Compare this with a role playing situation set on a ranch near a Western town in the United States. For reference, these might be helpful: "The Country Community" (EBF - #7740 - set of six filmstrips), or the film "The American Cowboy" (Ford Motor Co. - free - 30 min. - Educational Affairs Dept., The American Road. Dearborn, Michigan 48121).
16. Research in encyclopedias the role of religion in the life of people of undeveloped grassland areas (Mongolia, Eastern Russia,

Africa) and in developed grassland areas (Argentina, Western U. S., Western Russia). Children might suggest why simple forms of religious belief are common in undeveloped grassland areas.

17. List and sample foods from Russia: beef stroganoff, black bread, caviar, etc.
18. Invite a person of Russian descent to tell about the religion, holidays, dress, daily life of Russian people, and if possible write and speak some of the Russian language.

Understandings To Be Developed (Economic Organization)

1. The economic base of life for people in much of the undeveloped grasslands of the world, as in Eastern Russia, Mongolia, and Africa, in nomadic herding.
 - Nomadic herding is a form of subsistence agriculture, since it provides nomads with the basic necessities of life.
 - There is little specialization of labor, for everybody helps to tend the herds and to perform the tasks that are essential to life.
2. The economic base of life in the developed grassland areas of the United States and Russia is farming and cattle ranching.
 - In the more eastern grasslands of central U. S., known as the "corn belt," adequate rainfall makes possible very productive mixed farming.
 - One major activity in this area, and in the pampas of South America, is the fattening of beef cattle and hogs with the grain products, mostly corn, grown on the farms.
 - In Western grasslands of Russia, some beef cattle and hogs are raised, but most of their efforts are aimed at producing grain (wheat) for human consumption.
 - Farther west, in the drier grasslands of central U. S., the emphasis shifts to wheat farming and, in the very dry lands, to cattle ranching.
 - Scattered throughout these developed grasslands in both the U. S. and the U. S. R. are many communities which provide needed economic services to farm people (shops, businesses which provide agricultural equipment and machinery, clothing, entertainment, etc.).

Information Needed (To Develop Understandings)

1. What is the economic base of life for people of the undeveloped grasslands of the world?
2. Why is there little division of labor and specialization among nomadic herders?
3. Why do the people of the Russian and American grasslands produce more than they themselves can consume?
4. Why are many communities needed to provide economic services to the people of the developed grasslands?
5. Why do the people of Russian grasslands concentrate on the growing of wheat rather than the fattening of livestock?
6. What are some of the essential services that must be supplied to the farmers near these communities?

Learning Activities (Economic Organization)

1. List the occupations which people may have in grassland areas, (based on discoveries from Social organization activities). How many of these are related to the vegetation and climate of the area? Learn the words gaucho, livestock, consumer, consumption, etc.).
2. View and discuss such films as "From This Land" (Association Films #S-589 - color - free) or "The American Farmer and Our Food Supply" (Set of nine filmstrips - Eye Gate), or "Dependence on Meal Raisers" (Curriculum Filmstrips - #435, 436). Class discussion on the importance of grasslands to the general population may result.
3. Send for "Meat & the Mississippi" (limit 10 copies) a story of livestock growing, meatpacking, etc., from Swift and Company, Public Relations Dept., 115 West Jackson Blvd., Chicago, Illinois 60604: or send for map "Land Resource Regions and Major Resource Areas of the United States" - from U. S. Dept. of Agriculture, Soil Conservation Service, Washington, D. C. 20250.
4. Discuss the economic activities of the grasslands in Argentina by seeing such filmstrips as "Argentina - Resources, Industries and Products" (Eye Gate Series 137, B) or economics in U.S.S.R. "Farming & Rural Life in the Soviet Union" (Jam Handy - The Soviet Union Today series). Make a comparison of the products derived from these grassland areas.
5. Arrange a bulletin board display of grassland animals (sheep, hogs, and cattle) showing all products derived from their use, (leather products, meat, dairy products, etc., which could be illustrated with

small pictures of products.

6. View and discuss such films as "Horsemen of the Pampa-Argentina" (United World Film - obtain through Syracuse Film Library) or "Sheep Ranch Country-Southeastern Australia" (United World Films - obtain through Syracuse Film Library).
7. Make a chart showing uses of the grassland areas of the United States with particular emphasis on corn, wheat and then cattle raising as one progresses from east to the more arid western plains of the U. S.
8. The interdependence between corn production and cattle raising can be clearly demonstrated after seeing such films as "Cattle and the Cornbelt - the Middle West" (World Film Co. - obtained through Syracuse Library).
9. The importance of wheat growing in providing bread for many people could be discussed after seeing such films as "Bread for the City" (Film Associates - rental \$5) "Behind the Scenes at a Supermarket" (Film Associates, rental \$5) or examining such study prints as "Supermarket Helpers" (SP 123 - SVE Community Helpers series).
10. Our dependence on the farmer or cattle raiser is illustrated by using such filmstrip series as "How We Get Our Food" (SVE series of 4 filmstrips - series 203). Arrange a display around a U. S. map showing the chain of economic activity in the growing and producing of many foods. Also helpful may be "America: Meat on the Hoof" (*National Geographic* - Jan., 1952).
11. How does the farmer rely on the city? Class may list items and service which rural people need from a city (i.e., farm machinery, a market for his goods, etc.). Such films as "Farmer Don and the City" (Film Associates - rental \$5) may be helpful.
12. Bring in actual samples of grassland products, such as wheat or corn. Experiment with grinding the wheat to flour and compare your flour with purchased sample. Make your own cornmeal and discuss various ways it could be prepared for eating. Class may solicit aid from personnel in school cafeteria in the use of ovens to bake bread. An able student may report on the black bread of Russia.
13. Collect food wrappers showing ingredients from the grasslands to indicate the wide uses and distribution of these products. Invite a local butcher to speak with the class about the types of meat from pigs, cattle, and sheep and the location on the animal of primary meat cuts.
14. An able student might read about farming in the U.S.S.R. using such books as *Soviet Union* (by Jackson-Fideler Co.). His report may include the relationship of governmental direction to the farmers.

Such words as "collective" or "communal farm" may be helpful.

15. Examine such maps as A. J. Nystrom's "Wheat and Rice Map" (FW 4) and "Cattle and Dairying" (FW 13) to discuss the areas of high wheat and cattle production in the world. Children should suggest reasons for greater production in some areas than in others.
16. Undeveloped farming areas of Africa may be discussed after viewing such filmstrips as "Children of the African Desert" (Eye Gate - #160 H) or "The Eastern Highlands" (SVE - #289-2). The grasslands of Australia are discussed in such filmstrips as "Australia-Natural Resources and Agriculture" (SVE - #290-22) or "Walk Through Australian Country" (Bowmar Co. - #8025).
17. Have children research the types of currency used in Russia, Australia, Argentina, Africa. Collect stamps and samples of currency if possible.

Understandings To Be Developed (Political Organization)

1. The people of the undeveloped grasslands in Asia and Africa usually have a tribal form of government, as do almost all nomadic people.
 - Tribes are governed by chiefs who exercise control over their people assisted by a council of elders.
2. The people of the grassland communities of the U. S. have governments much like our own community.
 - The chief executive of the community is a mayor who is elected and charged with administering municipal services for the village or city.
 - The laws and regulations which govern the life of the city or village are made by the city council (or similar groups), the members of which are elected by popular vote.
3. The people of the grassland communities of the U.S.S.R. are governed by leaders appointed by Moscow.
 - The people are given only one choice on ballots from which to elect their local officials.

Information Needed (To Develop Understandings)

1. Why do people in undeveloped lands usually live in tribal groups?
2. To what extent is a "council of elders" a democratic type of institution.

3. How are grassland communities of the U. S. governed?
4. How are grassland communities of the U.S.S.R. governed?
5. To what extent is each type of government democratic in the grassland communities under study?

Learning Activities (Political Organization)

1. Review the concept of tribal government and its relationship to developed or undeveloped areas as demonstrated in previous units. Discover, through research, which grassland areas have tribal governments. Discuss the relationship between tribal government and the nomadic pattern of life. Such filmstrips as "Native Tribes" (EBF - from series "Africa") may help clarify and illustrate tribal governments in some grasslands.
2. View and discuss such films as "Our City Government" (Film Associates - rental \$5) or filmstrip "How We Govern Our Cities" (FOM - 75k) and relate to government of U. S. grassland areas.
3. Use such films as "Russian Life Today" Inside the Soviet Union" (Bailey Films, Inc. - 19 min. - rental \$10) as a basis for discussion of the political organization in the U.S.S.R. Able students might report after researching the government of U.S.S.R. using such books as "The Soviet Union" (by Jackson-Fideler Publishers).
4. Based on the understandings derived from the above filmstrips and readings, make a comparison chart of the aspects in each of the forms of government found in grassland areas (tribal, democratic, and communist). Consider such ideas as who are the leaders and how do they obtain their position.
5. Review the meaning of "democracy" and initiate a discussion determining to what extent each form of political organization noted above is democratic.
6. Examine a picture of a Russian flag and discuss its symbols and their probable meanings (i.e., sickle and hammer).
7. Able students may research the forms of government found in other grassland areas considered (Africa, Argentina, Australia).
8. Current events clippings could be collected and displayed as they relate to personalities or political leaders in the world's grasslands.
9. Role play a situation in which a farmer in each of three grassland areas (Russia, U. S., and Africa) is met with the problem of a water shortage. In each case the farmer should appeal to local

officials for assistance. Encourage terminology such as (mayor, chief, town, or city council, Party official, etc.).

Evaluation

- I. Pupil Self-Evaluation - see suggested form in Desert unit.
- II. A. Teacher Evaluation - see suggested form in Desert unit.
- B. Discussion Questions for Review:
 - . What is a grassland and where are the major grassland areas of the world?
 - . Describe the characteristic climate of the mid-latitude grasslands.
 - . What animals are found on grasslands and why are they important?
 - . How are farmers and city dwellers dependent on each other?
 - . What occupations are common to grassland people? Why?
 - . In what ways is the life of an American cowboy similar to that of an Argentine gaucho?
 - . What types of government are found in grassland areas of the world and how are they alike or different?
- C. Other Evaluative Techniques
 - . Creation of multiple choice, short answer and matching tests (mastery of pertinent facts and skills).
 - . Committee reports may be presented and discussed.
 - . Make a summary mural graphically showing aspects of life in the major grasslands of the world. Use of the land, extent of community development, daily activities, and governmental patterns may be illustrated.
 - . Suggested essay questions:
 - Describe the plant life and use of the land you would see as you took a trip from the eastern to western section of the U. S. grassland area.
 - Select one product of the grasslands and tell about its trip from the farm or ranch to your home. Be sure to

list each person whose job helps bring this product to your home.

- Why do many farmers in grasslands grow more wheat than they need for their own family?
- How is the government of the people in the African grasslands different from that in the Russian grasslands?
- Why do some people of the grasslands move often?

III. Cooperative Evaluation

- . What ways of living are found in grassland areas of the world? How are they similar or different?
- . Why are grassland areas important to the rest of the people in the world?
- . Have children select one grassland area they have studied and tell why they would like to live there.
- . Invite another class to hear a committee-prepared "first hand report" from a "native" of each grassland area studied. The reporter should assume role of a visiting resource person and tell about his community and daily life of his neighbors.

Teaching Materials

Teachers' References

Books

Carter, George. Man and the land. Holt. 1964. \$9.95.

Periodicals

National Geographic Magazine. National Geographic Society, Washington, D. C.
\$8.

Maps

Annual rainfall map; July ocean currents; temperature ranges. Denoyer-Geppert. 44" x 36". \$11.25. (World relations sets)

Cattle and dairying. A. J. Nystrom. 50" x 32". \$14.75. (World product maps)

Density of population map. Denoyer-Geppert. \$11.25. (World relations set)

Land resource regions and major resource areas of the United States. U. S. Department of Agriculture, Soil Conservation Service, Washington, D. C. 20250. 17" x 22".

Shows in color, clearly marked and identified, the major resource areas of the United States. Legend gives a concise description of each area.

Population density map. Rand McNally. \$19.75. (World geography maps)

Shows population density per square mile of total area and cultivated land for Argentina, Australia, Brazil, China, France, Germany, India, Pakistan, Japan, Soviet Union, Britain, and United States. Indicated inhabitants per unit area throughout the world on a square mile and square kilometer basis.

Wheat and rice. A. J. Nystrom. 50" x 32". \$14.25. (World product maps)

World portrait map. Rand McNally. 52" x 34". \$17.50.
Portrays the world's terrain in natural colors

Materials for Children

Books

- Banks, Marjorie. How we get our dairy foods. Benefic Press. 1963. \$1.80. K-3.
Includes facts about farms where dairy cattle are raised and about the things made from milk
- Bergamini, David. The land and wildlife of Australia by David Bergamini and the editors of Life. Time Inc. 1964. \$4.73. 7-9. (Life nature library)
- Berry, Erick. Eating and cooking around the world: fingers before forks. John Day. 1963. \$3.50. 4-7.
Tells how national customs influence the type of food and manner in which it is eaten
- Bleeker, Sonia. The Masai; herders of East Africa. Morrow. 1963. \$1.84. 4-7.
Tells about the nomadic Masai of East Africa
- Blunden, Godfrey. The land and people of Australia. Rev. ed. Lippincott. 1963. \$2.93. 4-7.
A comprehensive survey of economics, politics, social life and customs, natural resources of Australia
- Buehr, Walter. Bread: the staff of life. Morrow. 1959. \$2.78. 2-5.
History of breadmaking from the primitive breads to the variety of breads made today.
- Caldwell, John. Let's visit Argentina. Day. 1961. 3-6.
- Cavanna, Betty. Doug of Australia. Watts. 1965. \$2.96. 4-6. (The around the world today books)
The story of an 11-year-old boy who lives in Australia's Outback, goes to school only with his brothers and sisters and three aborigine children and saves himself in a tough spot by remembering what the aborigine had told him.
- _____. The first book of wool. Watts. 1966. \$2.12. 4-6.
Describes the properties of wool, its advantages and disadvantages, which animals supply the fleece, the importance of sheep raising and the spinning and weaving industry
- _____. Pepe of Argentina. Day. 1961. \$2.95. 3-6.
- Chapin, Cynthia. Dairyman Don. Whitman. 1964. \$1.95. K-3.
Tells of the things made from milk
- Coastworth, Elizabeth. Sod house. Macmillan. 1954. \$1.98. 4-6.
Isle Traubel, new emigrant, learns how to be a pioneer in Kansas just before the Civil War.

- Durack, Mary. Kookanoo and the kangaroo. Lerner. \$3.79. 4-6. (An outstanding selection from Australia)
The young boastful aborigine, Kookanoo, is outwitted by the kangaroo he sets out to spear. Told in clever verse form and tells much of Australian native culture with its close family ties.
- Eberle, Irmengarde. Grasses. Walck. 1960. \$2.25. 4-6.
Describes the cultivation and use of many types of grasses - hay, sugar cane, wheat, rice, and bamboo
- Fairservis, Walter. Horsemen of the steppes. World. 1962. \$2.35.
The story of the nomads of Eurasian steppes, covering 3000 years of conquest. For very able student or teacher.
- Fletcher, Sidney. The big book of cowboys. Grosset. 1950. \$2.18. 5-6.
A colorful picture book of cowboy lore
- Goetz, Delia. Grasslands. Morrow. 1959. \$2.94. 4-6.
Describes prairies, steppes, and savannas covering the climate, plant and animal life, and agricultural possibilities
- Hall, Elvajeane. The land and people of Argentina. Lippincott. 1960. \$2.93. 4-6. (Portraits of the nation series)
Survey of the country with emphasis on geographical and social conditions. Points out likenesses between people of Argentina and people of U. S. A.
- Hamli, Robert. Visit to a chief's son. Holt. \$3.50. 4-6.
An account of an American boy (the author's stepson) who visits a Masai tribe in Africa. Portrays likenesses and differences between Kenny, the American boy and Dionni, of the Masai tribe.
- Hastings, Evelyn. The dairy. Melmont. 1963. \$1.88. K-3.
Tells about the dairy where milk is prepared for marketing
- Hine, Al. Money round the world. Harcourt. 1963. \$3.69.
Traces the story of money from the barter system to use of metal coins and paper money.
- Israel, Marion. Sheep on the ranch. Melmont. 1958. \$2.50. K-3.
Shows the operation of a sheep ranch: preparing for the lambs, feeding, herding, and shearing
- Jackson, W. A. Soviet Union. Fidler. 1962. \$3.09. 4-6.
Includes chapters on geography, history, government, and areas of economy
- Landin, Les. About cowboys around the world. Melmont. 1963. \$1.88. 3-5.
Tells how the geographical location of the cowboy determines his clothing and methods of work

McCall, Edith. Cowboys and cattle drives. Children's Press. 1964. \$1.88. 4-6.

Short bibliographies

Mirsky, Reba. Nomusa and the new magis. Follett. 1962. \$3.15. 4-6.
(Sequel to: Seven grandmothers)

Tells about Nomusa's experiences as she leaves the Zulu Kraal to prepare for nursing

____ Seven grandmothers. Follett. 1955. \$3.15. 4-7.

Nomusa thinks she wants to be a witch doctor until she is won over by the new magic of Buselapi who has studied nursing

____ Thirty-one brothers and sisters. Follett. 1952. \$3.15. 4-6.

Depicts the South African veld and the primitive life and customs of the Zulus. Daughter of chieftain is central character.

Olden, Sam. Getting to know Argentina. Coward. 1961. \$2.68. 2-6.

Reinfeld, Fred. Catalogue of the world's most popular coins. Doubleday. 1965. \$5.21.

Rounds, Glen. Rodeo. Holiday. 1949. \$3.25. 4-6.

Scholat, G. W. Milk for you. Scribner. 1951. \$2.97. 2-5.

A story of the dairy industry

Scott Publications, Inc. Scott's Standard postage stamp catalogue. Scott Publications. \$14.

Gives date of issue, shape and value of all stamps ever issued by any government

Shapiro, Rebecca. Wide world cookbook. Little. 1962. \$2.18. 4-6.

Directions for preparations of one dish from each of 50 countries

Uhl, Melvin. About grasses, grains and canes. Melmont. 1964. \$1.88.

K-3. (Look, read, learn)

Tells about the cereal grasses, the canes, bamboo, and some wild grasses

Wilder, Laura. Little house on the prairie. Harper. 1953. \$3.27. 4-6.

The Ingalls family moves West in a covered wagon and builds a new house on Indian territory in Kansas.

Films

The American cowboy. Ford Motor Co. Educational Affairs Department. The American Road. Dearborn, Michigan 48121. Free.

Tells about the life and work of the American cowboy - how he works, lives and plays. Includes the daily routines at Roberson Hereford Ranch

in Gunnison, Colorado. Shows the roundup, branding, life in the bunkhouse, the drive to summer pastures, the rodeo, and winter feeding.

Animal town of the prairie - prairie dogs and their neighbors. Encyclopaedia Britannica Films. 10 min. Purchase: b&w \$60, color \$120.

Shows how the prairie dog modifies his environment to suit his need by digging a network of underground tunnels to provide shelter, protection, and nesting place.

Argentina. McGraw-Hill. 16 min. Purchase: b&w \$95, color \$190.

Film takes viewer to the various important regions of Argentina - the great pampas, the Andean foothills, the wheat country, Cordoba, the nation's automobile center, and the sheep ranches of Patagonia.

Argentina - people of the Pampa. Encyclopaedia Britannica Films. 16 min. Purchase: b&w \$90, color \$180.

Shows rural and urban life in the agricultural pampas and the center of commerce and industry. Points out that the economy depends on the exports of wheat, flax, corn, wool, and beef.

Australia. Encyclopaedia Britannica. 2d. ed. 22 min. Purchase: b&w \$120, color \$240; Rental: b&w \$5.50, color \$8.

Gives an insight into Australian life of the whole continent.

Australia - island continent. United World Films. 17 min. Purchase: b&w \$115, color \$195.

Shows Australia today as a country attracting new industry. The vast cattle and sheep farms are shown as being very important.

Behind the scenes at the supermarket. Film Associates. 11 min. Purchase: b&w \$60, color \$120; Rental: \$5.

Illustrates the people and jobs involved in the operation of a large supermarket.

Bread for the city. Film Associates. 10 min. Purchase: b&w \$65, color \$120; Rental: \$5.

Shows how those who live in cities depend on others to supply them with bread.

Canada - the prairie province. Encyclopaedia Britannica Films. 16 min. Purchase: b&w \$90, color \$180; Rental: b&w \$4.50, color \$6.50.

Surveys Manitoba, Saskatchewan, and Alberta. Describes the recent oil discoveries which are competing in importance with the traditional wheat production of the regions. Shows physical geography and industries of the region.

Cattle and the corn belt - the middle west. United World Films. 20 min. Purchase: b&w \$110.

Shows America's corn belt as the center of cattle raising. Animals raised in the far western plains are sent to the corn belt for fattening before marketing. Shows other work and family activities and corn belt life.

The Central farming region: food for the nation. McGraw-Hill. 14 min.
Purchase: b&w \$90, color \$180.

Gives reasons why central farming region is a major source of food. Emphasizes various types of farming in the region - dairy farming in North Central states; corn and hog growing in the central area; wheat farming in Great Plains. Includes production of beef cattle and of fruits and vegetables along the eastern shores of Lake Michigan.

Corn farmer. Encyclopaedia Britannica Films. 15 min. Purchase: b&w \$75, color \$150.

Shows life on a modern corn farm where the farmer makes fullest use of modern machinery to produce record yields

Farmer Don and the city. Film Associates. Purchase: b&w \$60, color \$120; Rental: \$5.

Shows the interdependence between the farmer and the city

Foods around the world. Coronet. 11 min. Purchase: b&w \$60, color \$120.

Examples of what people on six continents eat. Illustrates that where conditions are similar, foods are similar.

From this land. Association Films, Inc. 17 min. Color. Free.

Photographed throughout America; a father tells his son of the countless products of the farm, of the conservation that is necessary, and the scientific farming and equipment used.

Horsemen of the Pampas - Argentina. United World. 20 min. Purchase: b&w \$110.

Shows the horsemen, who live on the estancia, rounding up cattle, breaking in wild horses, and driving cattle to market like the American cowboys

Indians of the plains: present day life. Buchan. 11 min. Color. Rental: \$5.

Shows how present day Plains Indians are learning to use rich grasslands of their reservation to become self-supporting

Life in grasslands (Argentine Pampas). Coronet. 11 min. Purchase: b&w \$60, color \$120.

Presents a visit to a family and a community living on one of the representative grasslands of the world. Includes climate, geography, food crops, cattle, and sheep.

Life in the grasslands (North America). Encyclopaedia Britannica Films. 11 min. Purchase: b&w \$60, color \$120.

Shows the variety of plant, animal and insect life on prairie grasslands. Includes closeup of prairie dogs, hawks, rabbits, coyotes, antelope, and buffalo.

Life on a cattle ranch. Coronet. 11 min. Purchase: b&w \$60, color \$120.

Explains how a cattle ranch is operated, including work and pleasures

raising and selling cattle

Machines that help the farmer. Film Associates. 11 min. Purchase: b&w \$60, color \$120; Rental: \$5.

Comparison of children using hand tools to plant a garden and their father using powered machines for his work

Meat - from range to market. Encyclopaedia Britannica Films. 10 min. Purchase: b&w \$60.

Tells the story of the meat we eat from the grasslands of the open range to the corn belt fattening stations to the packing house, and finally to the store ready for consumption.

Our city government. Film Associates. 9 1/2 min. Purchase: b&w \$65, color \$120; Rental: \$5.

People who live in cities need a city government to provide them with services and to make and enforce laws. Film shows a representative in the city council as he helps decide on needed services and necessary laws. Government is needed to make the city a better and safer place.

Riches of the veld - South Africa. United World Films. 20 min. Purchase: b&w \$110.

The grassy plain - or veld - is a fine farming and grazing land. Shows also the mineral resources of the area - gold, diamonds.

Russian life today: inside the Soviet Union. Bailey Films, Inc. 2d. ed. 19 min. Purchase: b&w \$120, color \$225; Rental: b&w \$4, color \$10.

Shows Russian people in cities and rural communities at work in school and at home. Includes stores, markets, public buildings, hospitals, factories, schools, art galleries, and the Kremlin. Detailed views of farming communities. Government sequences show a celebration on Red Square. Shows rigid state control.

Sheep ranch country - Southeastern Australia. United World Films. 20 min. Purchase: b&w \$110; Rental: University of Michigan, \$4.25.

Presents sheep raising and wheat farming in semi-arid regions. Shows population concentration in a few large seaports.

The truck farmer. Encyclopaedia Britannica Films. 2d. ed. 11 min. Purchase: b&w \$60.

Shows the main truck farming areas of United States. Pictures activities on a truck farm in the Rio Grande Delta.

The wheat farmer. Encyclopaedia Britannica Films. 2d. ed. 14 min. Purchase: b&w \$75, color \$150.

Shows life and work on a wheat farm in the wheat belt. Shows soil preparation, planting and harvesting. Includes the struggle against bad weather.

Filmstrips

The American farmer and our food supply. Eye Gate. Color. \$5 ea. Set of nine, \$39.

The American Farmer
Animals on the Farm
Machines on the Farm
Wheat for Bread
Corn for All

Dairy Farming
Cattle Raising
Fruit Farming
Truck Farming

Argentina - resources, industries and products. Eye Gate. Color. \$5 ea. With tape, \$10. (South America: the ABC Nations, Uruguay and Paraguay)

Argentina - the land and the people. Eye Gate. Color. \$5 ea. With tape, \$10. (South America: the ABC Nations, Uruguay and Paraguay)

Australia. Eye Gate. Color. \$5 ea. Set of nine, \$39.
The following filmstrips from the above set are useful:

The land
Agriculture
Livestock

Australia - cities and industries. Society for Visual Education. 48fr. Color. \$6. (Modern Australia and the Pacific Islands)

Australia - farming and mining. Jam Handy Organization. \$5.95. (Australia, Indonesia, and the Philippines)

Australia - natural resources and agriculture. Society for Visual Education. 49fr. Color. \$6. (Modern Australia and the Pacific Islands)

Australia - ranching. Jam Handy Organization. Color. \$5. (Australia, Indonesia, and the Philippines)

Children of Argentina. Eye Gate. Color. \$5. With tape, \$10. (Children of South America)

Children of Russia in Europe. Eye Gate. Color. \$5. (Children of Southeast Asia and the Soviet Union)

Children of the African Desert. Eye Gate. Color. \$5. (The continent of Africa: the children of Africa.)

- Dependence on meat raisers. Curriculum Filmstrips. Color. \$4.95. (Interdependent Nation - U. S. A.)
Presents topography, climate, rainfall, soil, and natural resources as well as an explanation of the type of living and the items produced
- Dependence on wheat and corn workers. Curriculum Filmstrips. Color. \$4.95. (Interdependent Nation - U. S. A.)
Presents topography, climate, rainfall, soil, and natural resources as well as an explanation of the type of living and the items produced
- The eastern highlands. Society for Visual Education. 63fr. Color. \$6.50 ea. With record, \$10. (Africa, the land of developing countries)
Presents the game preserves and important crops.
- European Russia and the Ukraine. Jam Handy Organization. 45fr. Color. With record, \$11.45. (The Soviet Union today)
- Farming and rural life in the Soviet Union. Jam Handy. 45fr. Color. \$11.45 ea. for filmstrip and record.
- How animals live in the grasslands. Curriculum Filmstrips. Color. \$4.95. (Animal environments - adaptations)
Show how animals breathe, move, find food, build homes, protect themselves, and raise their young.
- How we get our foods. Society for Visual Education. 41fr. Color. \$5 ea. Set of four, \$16.25.
The story of fruits and vegetables
The story of milk
The story of bread
The story of meat
- How we govern our cities. Filmstrip of the month. Audiovisual Division, Popular Science Publishing Co. 40fr. Color \$6.
An election for mayor takes place in fictional Center City. Shows the various services and activities of a typical municipal government in a democratic society.
- Green lands. Society for Visual Education. 48fr. Color, \$6. (Your home in the Americas)
Shows the various types of vegetation from high to low latitudes and along the 40th parallel.
- Let's explore a lawn. Society for Visual Education. 51fr. Color. \$6. (Exploring the world of nature)
Shows common weeds and grasses as well as animals life that effects the soil.
- Life on grasslands and prairies. Society for Visual Education. 56fr. Color. \$6. (Modern biology: environment and survival series)

Life on the farm. Encyclopaedia Britannica Films. 45fr. Color. \$6 ea.
Set of six, \$36.

Milking	Haying
Gathering eggs	Picking vegetables
Feeding the animals	Picking fruit

The mid-latitude grasslands. Programmed geography. Eye Gate. Color.
Set of six, \$30. (The seven regions of the world)

Introduces blizzards, storms, contrasts of summer and winter, the surface of the land and the adaptations necessary to sustain the grasslands.

Mid-latitude lands of the four seasons. Programmed geography. Eye Gate.
Set of six, \$30.

Six color filmstrips teaching the four seasons and their contrasts.
Samples of vegetation are shown. Growing season is explained.

The Middle West. Society for Visual Education. Color. \$6 ea. Set of four, \$19.

The corn belt	The dairy and forest region
The wheat belt	Cities and commerce

The milk we drink. McGraw-Hill. 27fr. Color. \$6.
Milk is traced from cow to child.

Native tribes. Encyclopaedia Britannica Films. 55fr. Color. \$6. (Africa: Tanganyika, Kenya, Uganda)

Presents two tribes with their daily routines and colorful ritual ceremonies.

Prairie provinces and northwest territories. Society for Visual Education. Color. \$6. (Canada: regions and resources)

Walk thru Australian country. Bowmar. 24fr. Color. \$3. (Social studies series)

Records

Argentine folk songs. Folkways/Scholastic Records. 10 in. 33 1/3 rpm. \$4.15.

Sung in Spanish with Octavio Corvalan with guitar. Includes Christmas songs, Indian songs and dances.

The cowboy: his songs, ballads and brag talk. Folkways/Scholastic Records. 2-12 in. 33 1/3 rpm. \$11.58.

Music of the Ukraine. Folkways/Scholastic Records. 12 in. 33 1/3 rpm. \$6.79.

Mountain songs and folk dances from Central Ukraine and Carpathia.

Pictures

Australia, New Zealand, Oceania. A. J. Nystrom & Co. Pictures. Color.
Set of seven, \$13.50.

Sydney, Australia	Mt. Cook, New Zealand
Ayers Rock, Central Australia	Fanning Island, Gilbert
Sheep farming, New South Wales	Archipelago
Wellington, New Zealand	Tuamotu Islands

Dairy helpers. Society for Visual Education. Study prints. Set of eight, \$8. Color.

Farm boy at work	Milk processing
Using milking equipment	Milk bottling
Checking milkhouse	Warehouseman loading truck
Milk tank truck	Home delivery milkman

Farm and ranch animals. Society for Visual Education. Study prints. Color. Set of eight, \$8.

Dairy cows (Guernsey)	Geese
Horse and foal	Hogs and shoats
Hen and chicks	Sherpard lambs
Turkey	Beef cattle (Hereford)

Farm animals. Eye Gate. Teach-A-Charts. Color. Set of 10, \$6.50.

Supermarket helpers. Society for Visual Education. Set of eight, \$8.
(Community helpers)

Includes:

Stocking shelves	Preparing meat
Packaging produce	Customer service
Sewing produce customer	Checking out an order
Store dairy manager	Unloading products

Pamphlet

Meat and the Mississippi River. Swift and Company, Public Relations Dept.,
115 West Jackson Blvd., Chicago, Illinois 60604. (Limit of 10 copies
per teacher)

An imaginary journey telling where livestock is grown, how it is
marketed, about meat consumption and meat packing companies.